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ABSTRACT

This third and final year-end report of the Highline, Washington, K-12 Career Alternatives Model project contains individual reports of each of the six major program components and the two support components. Each includes program description, conclusions, and recommendations. The six program components are examined in light of the project goals they addressed: to provide each student opportunities to consider career opportunities by (1) Early Vocational Awareness (elementary level) providing an insight into his relationship to various facets of the world of work; (2) Work Sampling Exploration (junior high level) assisting in self-evaluation of his interests, abilities, and values relating to a variety of occupational roles; (3) Career Value Renewal (all levels) developing in him an understanding of the value and dignity of each person's work in creating a productive society; (4) Employment Skills Clusters (senior high level) developing his employment skills and competence to enter the job market; (5) Guidance (secondary level) providing decision-making and planning activities as preparation for future training and education related to his life's work; and (6) Infusion (all levels) meeting all project goals by incorporating career education concepts into the established subject area curriculums. The two support components reported are exportation and dissemination of project information and staff development. Appendixes include project objectives, time schedules, enrollment and follow-up figures, and a project position paper. (JH)

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ED155327

FINAL REPORT

Project No. V361123
Grant No. OEG-0-73-5289

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Highline's Career Alternatives Model

Exemplary Project in Vocational Education
Conducted Under
Title I, Part D of Public Law 90-576

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CE 016 031

July 1, 1976

ABSTRACT

I. Time Period

This report covers the three years of the Career Alternatives Model Project, beginning July 1, 1973 and ending June 30, 1976.

II. Project Goals and Objectives

A. Definition of Career Education

The staff of this project resisted the temptation to equate career education with all education. Rather, they have tended to focus on the individual's role of worker as the basic concern of career education. In taking this conservative approach, the staff does not imply that family life, consumerism, leisure activity, and citizenship, to name some of the more familiar elements which are often included in career education, are not the appropriate concern of public education. But we believe the national leadership which initiated the career education movement did so in response to a limited problem - closing the gap between school and work. Career education will not be able to solve this problem if it exuberantly accepts responsibilities for all of education's goals.

B. Basic Project Goals

Prior to application for this project, the Highline District Board of Directors adopted four groups of goal statements, including the following one:

To Provide Each Student Opportunities to Consider Career Alternatives by:

- providing an insight into his/her relationship to various facets of the world of work.
- assisting in self-evaluation of his/her interests, abilities and values relating to a variety of occupational roles.
- developing in him/her an understanding of the value and dignity each person's work in creating a productive society.
- developing his/her employment skills and competence to enter the job market.
- providing decision-making and planning activities as preparation for future training and education related to his/her life's work.

The Career Alternatives Model (CAM) adopted these statements as its basic goals. Consequently, the project was designed to develop and implement a district-wide, K through 14 career education program that would achieve them.

C. Secondary Goals

In addition to the goals stated above, the project was committed to the following secondary goals:

1. Guidance. Reemphasis and restructuring of the guidance function to include career education.

2. Infusion. Development of an infusion strategy to complement the major thrust components (see below).

3. Staff Development. The development of a variety of in-service programs directed toward teachers, administrators, special support personnel and project staff.

4. Exporation. The establishment of regular means for disseminating project information to other educators.

D. Project Objectives

1. Students Objectives. During the course of the project, the original student objectives were refined to include the following:

- Students participating in the project will demonstrate an increase in self-awareness in relation to the world of work.
- Students participating in the project will demonstrate an increased awareness of and knowledge about work.
- Students participating in the project will demonstrate an increased awareness of the data-people-things construct as applied to jobs.
- Students participating in the project will demonstrate increased thought about career decisions and a greater use of resources for purposes of learning about careers.
- Students participating in the project will demonstrate increased competency in career decision-making skills in terms of (a) increased time spent thinking about careers, and (2) a greater use of resource materials for this purpose.

2. Process Objectives

To assure successful operation of the project and a reasonable chance of attaining the goals and objectives presented above, the project staff identified a number of specific procedural objectives within the framework of the project's major components. These objectives were presented originally in the project proposal. Second and third year revisions were submitted to the Region X office. The original procedural objectives, as well as the revisions, are included in Appendix A.

III. Procedures and Objectives

The project's original design called for five major-thrust components, each directed toward achieving one of the project's major goals. During the course of the project these were enlarged upon, revised and combined to include the following components:

- Early Vocational Awareness
- Work Samples Exploration
- Career Value Renewal Task Force
- Skills Training
- Guidance
- Infusion
- Exportation
- Staff Development

All project activities, accomplishments, conclusions and recommendations are reported within the format of these eight components. A summary of each follows:

A. Early Vocational Awareness (EVA)

Activities in this elementary level component were directed toward the goal of:

> Providing each student opportunities to consider career alternatives by providing an insight into his/her relationship to various facets of the world of work.

Throughout the duration of the project, EVA efforts were channeled in four major directions, including: (1) the development of curricular materials based on experienced gained in a previous Part C project; (2) the acquisition of commercial materials, including the nationally produced Bread and Butterflies television series; (3) promoting the use of both these groups of materials among teachers through staff services; and (4) the provision of community resource services for teachers, primarily through field trips.

In addition, during the project's third year, a grant from the Office of Career Education, USOE, provided for special activities aimed at gifted and talented students. This project operated in eight schools.

Project experiences at the elementary level illuminate a major problem of all career education activities at this level, namely a lack of evidence as to what knowledge will "make a difference" in the eventual occupational choice process of young people. Furthermore, how should such knowledge be delivered to students from a cost-effective point of view?

Though definitive answers have not been developed as a result of this project, specific recommendations regarding the development, purchase and use of materials, and the operation of community services are contained in the report. Furthermore, the staff has included several broad recommendations which can be used for guidelines in the development of any elementary-level career education project.

B. Work Samples Exploration

The Work Samples Exploration component was designed to make a major thrust toward the goal of:

> Providing each student opportunities to consider career opportunities by assisting in self-evaluation of the student's interests, abilities and values relating to a variety of occupational roles.

The primary effort in this component was the development and implementation of a Work Samples Lab which served approximately 2400 students during the course of the project. Other activities, conducted within the student's home school, included (1) the use of the Ohio Vocational Interest Survey; (2) the Hoffman Filmstrip Series; and (3) classroom related units of study.

Conclusions and recommendations cover both positive and negative factors which arose as a direct result of the Work Samples Exploration component. In general the Work Samples Lab proved successful and data included in the third-party evaluation indicated that students attending the lab made significant gains in their understanding of common skill factors found in a variety of jobs.

C. Career Value Renewal Task Force

The Career Value Renewal Task Force (CVRTF) was designed to make a major thrust toward the goal of:

> Providing each student opportuntities to consider career alternatives by developing in him/her an understanding of the value and dignity of each person's work in creating a productive society.

The promotion of value and dignity is admittedly an intangible goal. Recognizing this fact, a Career Value Renewal Task Force, including both district staff and members of the community, was established to study the problem. Throughout the project's first year this group met a total of ten times and submitted a final report, including recommendations to be acted upon by CAM during the project's second and third year.

Due to the broad nature of most of the CVRTF's recommendations, CAM's staff felt no direct action could be taken (except in those areas pertaining directly to CAM's program) without district board approval. Unfortunately, though board members reacted favorably to the report and accepted the recommendations for further study and action, no official action was ever taken. This was due largely to pressing financial matters which have occupied the board's attention during the past two years.

In retrospect, CAM's staff believes that career educators need to do some hard thinking in the whole area of values as they relate to work in twentieth century America.

D. Skills Training

The Skills Training Component of CAM was aimed at filling the district's goal of:

> Providing each student opportunities to consider career alternatives by developing his/her employment skill and competence to enter the labor market.

Basically CAM's Skills Training component and the district's established vocational education program were one and the same during the course of the project. Under the impetus of the project seven new programs were introduced and at least two more will be initiated next year. In addition, actual enrollment rose from 651 FTE's in the 1973-74 school year to 1165 FTE's in the 1975-76 school year.

From these figures, as well as follow-up data from graduating vocational students, it would appear that CAM has had a significant impact on the traditional vocational education program in the district. This has been due, in large part, because staff have developed new programs within sound guidelines developed to reflect local employment opportunities and the needs of a broad student population.

E. Guidance

The original project design called for a "placement" component as well as an emphasis on "guidance". By the end of the first year staff concluded that these activities were inseperable and they were grouped under the heading of guidance which was aimed at the goal of:

> Providing each student opportunities to consider career alternatives by providing decision-making and planning activities as preparation for future training and education related to life's work.

Project efforts in this area have been aimed in two directions. First, in-service training was initiated as a means for bringing the established guidance staff into the career education program. Secondly, new staffing patterns were experimented with as a means for giving emphasis to the objectives of career education. Whereas only mixed successes were achieved with the first approach, results of the second strategy have been very gratifying.

Each of the district's five high schools now has a full-time Vocational Information Specialist to coordinate guidance activities which have been initiated by CAM, including: (1) career resource centers; (2) wide-spread use of the Ohio Vocational Information Survey; (3) Worker-Trait Group filing systems; and (4) use of a Computerized Career Information System.

The long struggle that project staff experienced in getting the guidance component fully operational has led to the development of some fairly firm conclusions and recommendations, including: (1) the fact that new staffing patterns seems a stronger alternative than trying to bring the established guidance staff into a major career education role; (2) career resource centers provide a much needed visibility for the career education program at the secondary level; and (3) there is a need for developing a total guidance program around a single organizational framework for viewing the world of work.

F. Infusion

Though the original project design did not call for an "infusion" strategy, staff became convinced by the end of the first year that a major effort should be made to develop such an approach. Consequently, during the project's second and third year considerable time and effort was spent on (1) identifying a career education scope and sequence; (2) conducting an infusion workshop; and (3) developing a dissemination system for getting infusion ideas to teaching staff. Though these efforts were partially successful, a great deal of time and energy were spent trying to determine exactly what constituted an infusion strategy. This situation developed in part because of the emphasis given to infusion by national leadership in the field of career education, including the Office of Career Education in the USOE, without, in the opinion of CAM's staff, any conclusive evidence that it could carry the burden assigned to it in terms of career education's eventual success.

Consequently, in addition to a review of the specific efforts carried out by CAM, the final report also includes a rather lengthy discussion of several issues surrounding the strategy of infusion in the section titled Conclusions and Recommendations.

G. Exportation

Many exemplary projects fail to have a significant impact beyond the school or district where they are implemented because no specific plans have been made for disseminating project developments and information. To avoid this situation, specific provisions for definite dissemination activities were incorporated in the project's original design and subsequently carried out including (1) periodic publication of a newsletter titled the REPORT; (2) distribution of a variety of publications which were designed for specific in-district groups for purposes of describing the project; (3) distribution of curricular materials developed by the project staff or district teaching personnel; (4) conducting presentations and participating in state-wide workshops and in-service programs; and (5) hosting visitors to the project.

Though evaluating the impact of such efforts is nearly impossible, project staff believe the effort was well worth the time. There is little doubt that without such an effort, any project impact is sure to be a very limited one.

H. Staff Development

The promotion of staff development, both among the district staff at large and CAM's management staff in particular, was a major concern of the project throughout the three years. Many of the activities which promoted staff development have been included throughout the report as they are directly related to other program components. Others, which did not appropriately fit into other components have been described in a separate section.

I. Project Highlights

Three aspects of the project have been identified as highlights which should be noted because of their unique nature and/or their contribution to the project's overall success. These include (1) the need for a single world-of-work structure in the development of a career education program; (2) the career information centers; and (3) the Work Samples Lab.

IV. Evaluation

The third party evaluator's report makes up the final section of this report. Prepared by the Bureau of School Services at the University of Washington, the report summarizes the evaluation efforts conducted during the project's third year of operation. Results at the secondary level, including both the junior and senior high level, are positive. Results at the elementary level are generally inconclusive.

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Introduction

As the third and final year end report for the Career Alternatives Model project, this report covers the achievements of the project during its entire three years. Both the first and second year reports covered in considerable detail the administrative procedures which staff developed and implemented as well as specifics of the instructional programs that resulted. To present these details again would have been redundant as well as having created an unwieldy report. Consequently, this report has been limited in its scope and contents.

First, an effort has been made to highlight the major instructional programs which evolved from the project. Secondly, conclusions and recommendations related to each of these programs have been included. In keeping with this second focus, Appendix A includes a Position Paper developed by CAM's staff early in the project's third year. This paper, which was prepared for discussion purposes with other district staff, is a direct outgrowth of the staff's accumulated experiences during the life of the project and as such reflects a point of view heavily influenced by first-hand experience.

THE PROBLEM

I. Failure to Bridge the Gap

In our society we pin great hopes on education as the best way to prepare our young people for adult participation, including the role of worker. To this end we have created a vast public educational system and established high school graduation as at least a "mythical" point of arrival. Yet in recent years a growing body of evidence has been accumulated which suggests that many high school students are quite unprepared to either enter the labor market or become involved in additional education and training which will lead to employment. In summary, our educational system has failed to bridge the gap between school and work.

The apparent failure of education to bridge the gap between school and work does not mean that many people had not recognized the problem and attempted to come up with solutions. But these solutions were "occurring on a piecemeal and fragmented basis," hardly a satisfactory approach for a problem of such magnitude.

II. Career Education

In January, 1971, Sidney P. Marland, then Commissioner of Education, proposed

> .... that a universal goal of American Education, starting now, be this: that every young person completing our school program at grade 12 be ready to enter higher education or to enter useful and rewarding employment.

Elaborating upon this proposal, the U. S. Office of Education has promoted a new emphasis in public education under the umbrella of "career education." Basically, career education would attempt to implement Marland's goal nationwide and thus rectify the problems described above.

Though the call for action, and subsequent leadership, has come from the national level, if career education is to be given a chance, if it is to emerge from the "piecemeal and fragmented" state, it must occur at the local level. Only at this level can the pieces be put together in a functional and operating program that will demonstrate the validity of career education as an educational strategy for bridging the gap between school and work.

Highline's Career Alternatives Model has been an attempt to implement a "total" career education program at the local level.

PROJECT GOALS AND OBJECTIVES

I. Project Goals

A. Defining Career Education

Since its inception, the concept of career education has caught on very rapidly. Perhaps too rapidly, for as it has gained momentum it has also expanded rapidly in the scope it encompasses. Career education grew out of a recognized need - "to close the gap between school and work." To meet such a need is an ambitious goal, but nevertheless a limited one. The U.S.O.E. leadership now speaks of career education as the concept which can both revitalize and reform American education. They have, in fact, staked out so much "territorial responsibility" for career education that they have lent a deceptive truth to the statement that "all education is career education."

The development of appropriate student objectives to fit a program's goals is a difficult process under any circumstances. As the goals of career education have been "opened up" the task has become unmanageable. If career education is going to revitalize and reform American education there is no limit to the student objectives which might be considered appropriate.

As this project has progressed, its staff has taken a more limited view of the role career education should play in the total educational program. In the beginning it was a concern with the individual's role as a worker, and how he/she got there, that formed the heart of career education. We believe it still does. This is not a reactionary defense of the "work ethic" which may or may not be dying, and which has probably been overrated as a motivational factor in work anyway. Nor is it an unquestioning acceptance of the capitalistic economy that has evolved in our country and the effect it has on our daily lives. It is, we believe, simply a recognition that in 20th century America most of us provide ourselves with the basic necessities of life, and whatever luxuries we may choose, by participating as workers in a very diversified world of work.

True, the worker may also be a spouse and a parent, a purchaser of goods, and a person with leisure time on his or her hands, as well as a voter. Nor is it surprising that one's work, considering the amount of time and energy it demands, often plays an interacting role with these other facets of life. But to define career education to include family life, consumerism, leisure activity and citizenship, or whatever else one might choose to include, seems to us to be overly ambitious and bordering on professional arrogance.

To prescribe such limits for career education does not mean that these other areas are not the appropriate concern of public education, nor that they are currently receiving all of the support and attention they rightly deserve. But we believe the national leadership which initiated the career education thrust did so in response to a limited problem - closing the gap between school and work. Furthermore, we

believe it has been basically in response to this problem that congress has funded career education. And finally, we believe that it is as a solution to this problem that the public has accepted and welcomed career education.

B. Basic Project Goals

The process of arriving at the above definition of career education was shaped in large part by events which preceded the project. In May, 1972, after extensive community, staff, and student input, the Highline District Board of Directors adopted four major groups of goal statements, including the following one:

To Provide Each Student Opportunities to Consider Career Alternatives By:

- providing an insight into his relationship to various facets of the world of work.
- assisting in self-evaluation of his interests, abilities and values relating to a variety of occupational roles.
- developing in him an understanding of the value and dignity of each person's work in creating a productive society.
- developing his employment skills and competence to enter the job market.
- providing decision-making and planning activities as preparation for future training and education related to his life's work.

C. Secondary Goals

In addition to these major goals, which relate directly to the delivery of instructional services and subsequently to the achievement of student objectives, several other operational goals were established as outlined below.

1. Exportation

One legitimate complaint often leveled against exemplary projects is their low level of exportability. They simply fail to have significant impact beyond the school or district where they are implemented. Basically this occurs because the project includes no specific plans for disseminating information. The establishment of regular means for disseminating project information to other educators concerned with the development and implementation of career education was a consistent goal of CAM's.

2. Guidance

A reemphasis and restructuring of the guidance function, including the retraining of guidance personnel, has been a major goal of this project. The aim of these efforts has been first, to bring to career education the commitment to the individual student which has been the core of the guidance movement; and secondly,

to provide guidance people with the wide range of resources encompassed in career education, resources which they need if they are going to help students "choose from the widest possible range of opportunities."

3. In-Service

Just as career education programs must evolve at the local district level rather than by edict from the national level, their implementation must ultimately take place within the walls of individual school buildings. Consequently, teachers, building administrators, librarians and counselors must be both informed and sympathetic to the aims of career education. In order to prepare such a climate, CAM was committed to providing a variety of in-service programs.

4. Infusion

Most of CAM's instructional program was developed around five "major thrust" components (as described below under BASIC PROJECT DESIGN). These discrete components were designed to provide the visibility and vitality believed to be required of a new program if it was to become established. By the end of the first year, however, it became apparent that national leadership believed that the long range success of career education would depend on the degree to which it became infused with the established curriculum. Thus, CAM became committed to the development and implementation of an infusion strategy as well as the major thrust components.

II. Project Objectives

A. Student Objectives

The original project proposal identified sixty-nine student outcomes which were grouped under the five district goals pertaining to career alternatives. These were in turn categorized according to the grade level for which they were deemed appropriate, including grades 3, 6, 9, 12 and 14. These goals are included in Appendix A.

At the beginning of the project's second year the U.S.O.E. provided a group of student objectives that had been developed by Development Associates and requested that all Part D exemplary projects use these student objectives in conducting their third-party evaluations. After comparing these objectives with the original sixty-nine, a remarkable compatibility was noted as can be seen in Appendix A. Furthermore, the U.S.O.E. then backed away from their previous request and asked that the student objectives prepared by Development Associates merely be used as guidelines. As a result, a compromise was made.

Though the original sixty-nine objectives were retained, the third-party evaluator, in conjunction with the project staff, developed six objectives which reflected a high degree of agreement between the two groups of objectives. These objectives,

which were measured during the second and third year evaluation, include:

- Students participating in the project will demonstrate an increase in self-awareness in relation to the world of work.
- Students participating in the project will demonstrate an increased awareness of and knowledge about work.
- Students participating in the project will demonstrate an increased awareness of the data-people-things construct as applied to jobs.
- Students participating in the project will demonstrate increased thought about career decisions and a greater use of resources for purposes of learning about careers.
- Students participating in the project will demonstrate increased competency in career decision-making skills in terms of (a) increased time spent thinking about careers, and (2) a greater use of resource materials for this purpose.

B. Process Objectives

To assure successful operation of the project and a reasonable chance of attaining the goals and objectives presented above, the project staff identified a number of specific procedural objectives within the framework of the project's major components. These objectives were presented originally in the project proposal. Second and third year revisions were submitted to the Region X office. The original procedural objectives, as well as the revisions, are included in Appendix A.

BASIC PROJECT DESIGN

I. Exemplary Nature of the Project

In keeping with the exemplary nature of the project, as defined by the guidelines developed by the U.S.O.E., program components were developed by:

A. Expanding programs currently existing on a limited operational basis in the Highline District.

B. Implementing on an operctional basis programs from the "fragmented" successes the district has developed on a research and experimental basis.

C. Adapting procedures and techniques that have been effectively used in the field of education to attain similar goals.

D. Introducing programs that are new to the district, but are built upon proven concepts and procedures.

II. Major Thrust Strategy

The original design of this project was built around a "major thrust" strategy. Although each of the five goals defined under the district's commitment to career alternatives is based on the continuous development of the students from grades K through 12, the staff recognized that there are points at which a major thrust will bring the greatest results in terms of reaching the project's objectives. Thus, five major program components were developed, each aimed at one of the project's five goals and the student objectives developed for that goal.

In addition to these major thrust components, the project was designed to strengthen the role played by the guidance staff in career education. As the project progressed through the second year, it became apparent to staff that the distinction between "placement," one of the major thrust components, and "guidance" was negligible. Consequently, these two components were combined and are referred to in this report as "guidance."

An "infusion" component was also added during the second year of the project, as mentioned previously in this report. Project staff viewed this component primarily as a method which could be used throughout the entire project wherever it was deemed as an appropriate means for achieving project objectives.

The following outline clarifies the relationship that has existed between the major program components and the goals toward which they were directed.

Program Components	Project Goals
	To Provide Each Student Opportunities to Consider Career Alternatives by:
A. Early Vocational Awareness (Elementary Level)	providing an insight into his relationship to various facets of the world of work.
B. Work Sampling Exploration (Junior High Level)	assisting in self-evaluation of his interests, abilities and values relating to a variety of occupational roles.
C. Career Value Renewal (All Levels)	developing in him an understanding of the value and dignity of each person's work in creating a productive society.
D. Employment Skills Clusters (Senior High Level)	developing his employment skills and competence to enter the job market.
E. Guidance (Secondary Level)	providing decision-making and planning activities as preparation for future training and education related to his life's work.
F. Infusion (All Levels)	all project goals.

III. Support Components

In addition to the program components described above, two support components have been built into the design of the project.

A. Exportation and Dissemination

CAM made a definite commitment to exporting its experience base to other career education proponents throughout the nation, with particular emphasis on the State of Washington and Region X of the U.S.O.E. This was in addition to a concerted effort to disseminate information about the project among school staff and members of the local community.

B. Staff Development

Although staff development activities are not aimed directly at student objectives, their indirect contribution is often a crucial one to the eventual success or failure of program activities. Consequently, the project's design provided for an ongoing program of in-service and staff development activities aimed at various groups including teachers and administrators as well as the project's own staff.

PROJECT COMPONENTS

Though project reports of this nature usually present the procedures, methods, conclusions, etc. in separate sections, this format was deemed inappropriate in this case. The basic structure of this project has been determined primarily by the program and support components outlined in the previous section. As each of these components is distinctly different, it was decided to pursue a format that would maintain and convey the individual integrity of each component. Consequently, the remainder of this section is composed of eight separately prepared reports which are easily read, but do not slavishly follow a given format. These include:

Major Thrust Component

- Early Vocational Awareness
- Work Samples Exploration
- Career Value Renewal Task Force
- Employment Skills Clusters
- Guidance
- Infusion

Support Components

- Exportation
- Staff Development

EARLY VOCATIONAL AWARENESS

Throughout the duration of the CAM project the elementary thrust of the CAM efforts have been primarily directed toward, (1) the development of curricular materials, (2) acquisition of commercial materials, (3) encouraging the utilization of locally developed and commercial materials, and (4) the creation of a community resource service for teachers. In the 1975-76 school year, a separately funded project from the Office of Career Education, U.S.O.E., entitled, "Career Education for Gifted and Talented Students" operated in eight elementary schools and was managed through CAM.

The following information summarizes these efforts. Recommendations and conclusions follow the summary.

1. Materials (Curriculum) Development

CAM began by adopting a concept of reusable kits of career oriented material which related to either occupational clusters, worker traits, or special topics. This approach was developed locally under Part C funds, Vocational Education, during 1971-72. These kits were also designed to correlate with existing curricular programs in the elementary school.

Over the three year history of CAM, the model was expanded to include learning packages addressed to specific concepts. Evaluating those developed under the gifted and talented program, a total of 10 kits and learning packages have been developed. Through the project period, there was an increasing emphasis upon the data-people-things construct as a conceptual framework for development.

Rationale for the approach included the need for direct "hands on" experience by younger children, the encouragement of infusion by relating careers to the on-going curriculum, and the provision of materials which would be convenient and accessible to the teacher.

Kits or packages currently available include:

Title	Grade Level	Career Emphasis
Airport Careers	Primary	Transportation
Putting it Together	Intermediate	Things (manipulative)
Protective Services	Primary	Services
Music Careers	Intermediate	Fine Arts
Four in a Role	Primary	Role Playing Careers
Northwest Careers	Intermediate	Regional Careers
Communicating	Primary	Communication in Careers
Build Me a World	Primary	Things (manipulative)

Title	Grade Level	Career Emphasis
How Big is it?	Primary	Data (measuring)
I Run Things	Intermediate	Data (operating)
Click and Print	Intermediate	Photography Careers
Lets Get Together	Primary	Food Service
Ocean of Jobs	Intermediate	Marine Science
Get it While it Lasts	Primary	Retail Sales
Making a Million	Intermediate	Manufacturing
Saving the World	Intermediate	Environmental Careers
Colonies and Careers	Intermediate	Infusion (modern vs historical)
Using People Skills	Intermediate	People (definition)
People Power	Primary	Personal Service
Mmm That's Good	Primary	Food Service
Moving Around	Primary	Transportation
Who Works	Primary	General infusion (hats, etc.)
Parents and Careers	Primary	Infusion
When You Grow Up	Picture Set	Infusion

Packages Developed Under Gifted and Talented:

Creativity and Careers	Primary	Data
Weaving	Intermediate	Things
Leadership Skills	Intermediate	People
Mini Units	K-6	D-P-T (disadvantaged)
Solar Energy	Intermediate	Data
Biologic Careers	Intermediate	Data
Sewing and Careers	Intermediate	Things

II. Community Resource Specialist

CAM initiated a "person-machine" approach which was extremely well received by students and teachers. The Community Resource Specialist and a sixteen passenger van were combined to offer small group tours to business and industry. Ms. Fran Harrison filled this position which required contacting business and industry, consulting with teachers, suggesting materials, completing all scheduling and acting as driver and guide.

Through the 1976 school year 3938 students were escorted on these tours. Over the three years, a total of 8,201 students participated. Ms. Harrison made extensive use of tape recorders, cameras, and printed materials to augment the experience. Samples of these materials are included in Appendix B.

Primary advantages of this approach included:

A. decreasing teacher required efforts in scheduling--only one call was needed.

B. small groups which were well received by industry.

C. the provision of a consistant career focus through the specialist, e.g. there was no doubt that a trip to a bakery stressed workers more than bread.

D. liason efforts of one person were more successful as she became known to the business community. As an example, the various airlines do not allow students to board planes at Sea-Tac Airport. Most teachers would be told "NO." Over the past year, over twenty groups were allowed to board planes with Ms. Harrison. Further, she was invited to serve as a member of Alaska Airlines Community Relations Planning Committee.

E. a staff position permitted her to be informed of current thrusts in career education.

One myth that persists is that career education does not cost because it is infused rather than added on to existing programs. Ms. Harrison brought a unique and well received emphasis, however, there was a cost. Over the three years, these were:

Maintenance, fuel @ $ .30 per mile	$ 3,900.00
Salary (9 months per year, 8 hours per day)	21,000.00
Bus (Total life = 12 yrs: 3 yrs = $\frac{1}{4}$)	2,500.00
	$27,400.00

Per pupil costs would be 27,400 divided by 8,201 = $3.34. Over the past year, due to increased participation, the costs equal $2.75 per pupil.

III. Acquisition of Commercial Materials

While a variety of materials to supplement district resources have been purchased, only major items are listed. Utilization is described in the following sections.

Bread and Butterflies (AIT)

The fifteen program series, available on local PBS television, was also purchased on 16 mm film. The series emphasizes affective objectives in career education for intermediate age children. Locally developed workbooks were made available to teachers in classroom sets. Houghton Mifflin has recently advertised commercial materials to accompany the series which will be available for the 1976-77 school year.

In addition, an in-service course, "Affective Goals in Career Education" was offered through Central Washington State College and taught by a local counselor. The outline for the course was developed from the fifteen programs in the Bread and Butterflies Series.

Kingdom of Could Be You (Sutherland and Associates)

These short films highlight occupational clusters for very young (4-7) children.

Developed through U.S.O.E., they provide an introduction to careers. The series was purchased and is available locally.

Data-People-Things (McGraw Hill)

These three films introduce children to the three classifications introduced in the Dictionary of Occupational Titles.

My Career Dictionary (C.F.I.)

A copy of this dictionary for primary students is in each school. In addition, several schools have sets of dictionaries and a set is available for check out. A ditto master set to accompany the book has been purchased as well.

Career Workbooks (C.F.I. and Chronicle Guidance)

A large number of these workbooks have been purchased and utilized. Sets are available to check out.

Other resources include Highway to Work and Play (McKnight), Explore (Scholastic), Careers for All (three career texts by Benefic Press), Compulearn (Random House), and People Who Work With... (filmstrip sets by Guidance Associates), and a variety of cards, games, and pictures from Developmental Learning Materials.

People at Work (Encyclopedia Brittanica)

People at Work is a book and filmstrip series which has been purchased by several schools and is also available for check out.

When I Grow Up (Mini Productions - C.F.I.)

This innovative film series introduces children to occupational groups. While clusters are the theme, real people and children are portrayed.

IV. Utilization

One measure of teacher interest is the utilization of materials. The extent of field trip utilization has been described, therefore this section will be devoted exclusively to a description of building activity.

A. Bread and Butterflies

This series, now in its third year, has remained popular and widely used. During the 1975-76 year a total of 1863 workbooks were requested, reflecting 61 classrooms.

B. Locally Developed Kits

Use of the kits has continued on a sporadic basis. Factors include level of "promotion"

by CAM, maintenance, availability of other resources, and the perceived quality of an individual kit. During 1975-76, 130 teachers checked out kits for use, (3900 students). While a higher number utilized a kit than Bread and Butterflies, the variety of kits and grade levels reveals less impact.

During 1975-76 a per building allotment for career related materials was budgeted. At the elementary school level amounts ranged from $50 - $140 depending upon enrollment. A total of $2782.00 was allowed. Of this amount $2203. was spent (79%).

One picture of the utilization of materials can be gained from the following statements. During 1975-76

- an elementary student had a 19% chance of participating in a career field trip.
- an intermediate student had a 38% chance of viewing Bread and Butterflies.
- an elementary student had a 37% chance of using a career kit.
- an elementary student had a 10% chance of being involved in activities through the gifted and talented project.
- a primary student had a 25% chance of utilizing career workbooks.

Teachers tended to respond more to "complete units" rather than just supplementary material. In this sense "software" became more in demand than "hardware." Examples include the Bread and Butterflies workbooks and a unit "Colonies and Careers." The latter, consisting of only 7 pages, was utilized by over 800 students.

V. Gifted and Talented

As mentioned previously, Highline District received a grant from the Office of Career Education, U.S.O.E. As the grant was aimed toward elementary schools, it became the responsibility of the CAM assistant director to manage that project. A final report is required and will be submitted on June 30, 1976, which describes in detail the activities of that project.

Briefly, the project operated in eight elementary schools with selected groups of students. Primary student objectives included increased knowledge of the data-people-things construct and development of increased internal perception of control. Development of curricular materials and purchase of commercially prepared items augmented the district resources. In-service activities in this special topic were completed with 146 staff members. Teachers responded very favorably to project activities as indicated on a staff questionnaire.

VI. Recommendations and Conclusions

In overview, perhaps two weaknesses characterize not only elementary activities in CAM, but from this writer's perception, most other elementary programs as well. The first is a lack of basic knowledge of "what makes a difference" in the eventual occupational choice processes of young people. One can measure cognitive knowledge of careers, but we are not sure that this knowledge is of more value than memorizing the names of the presidents. An enthusiasm for direct experiences such as hands on activities, field trips, or shadowing experiences is easy to generate, but difficult to measure in effect. Learning theory tends to favor direct experiences, but over all those that occur are too infrequent to assess impact. Is, for instance, a career workbook costing $1.60 of greater or lesser value than a $2.50 field trip?

Infusion is often stressed as "the answer," yet without knowing what to "infuse" and when, curriculum has not been truly developed. Further, an assumption that career education is primarily aimed toward its secondary benefits, is difficult to defend. As an example, career education infusion may or may not help students to learn math skills, however, I am aware that Computer Monitored Learning (CML) can document dramatic effects.

Following a brief review of the five major efforts, recommendations are described.

A. Locally Developed Kits

These kits were developed at a time when few materials were available. As a visible resource they serve some value, however as long as there is no curricular program which relates directly, use will be sporadic. Revision would need a continual effort, not only of materials, but conceptual approach as well.

It is the recommendation of this writer that:

1. kits receiving little use be dismantled and materials donated to schools.
2. that kits receiving higher utilization, or those which have been newly developed be circulated on a prepared schedule through the V.I.S.
3. that only kits which add significantly new knowledge be continued.
4. that the district retain the management of the kits for one year.

B. Commercial Materials

Recommendations include:

1. That Bread and Butterflies be supported on a continuing basis through the purchase of workbooks, teacher in-service, or others.
2. That newly purchased material relate to (1) worker traits, (2) current occupational offering in this school district.

3. That career education be considered an ongoing program.

C. Community Resource Specialist

The Community Resource Specialist developed a series of impressions and recommendations based on her three-year experiences. These follow.

Recommendations:

The elementary-primary program that seems to be the most satisfactory from the viewpoint of student-teacher-parent involvement is based on a study of the classroom parents' careers.

A teacher might begin the study by helping the students focus in on the different kinds of jobs necessary to keep the school functioning. A walking tour around the school to see the "working areas" of each individual. Bringing the cooks, custodians, truck drivers, nurse, secretaries, and principal into the classrooms to talk about their work gives the students a good understanding of a variety of jobs of people with whom they are familiar.

The next phase, then, might be a discussion of parent occupations. Following this, parents could be asked into the classroom to demonstrate skills or the career bus can be used to take students into a business or working situation. Both students and parents seem to get much satisfaction from sharing their work. The parents take more interest in demonstrating methods and skills, when their children are involved. The children are proud to share their parents with their classmates. A greater understanding of the meaning of work results from such harmonious relationships.

An outgrowth of this study could be a discussion of the work of community helper, policemen, firemen, the grocer, druggists, gas station attendant etc. Seeing these people at work could be done on walking tours or by use of the career bus.

Elementary-Intermediate. The most successful trips for intermediate students were those that were extensions of social studies, science, and health studies. Trips into the community to some of the more sophiscated services or businesses were well received. Visits to the local hospital, radio and TV stations, veterinarians, telephone company, solid waste disposal stations, school district maintenance work shops, local airport, restaurants, and craft shops, expand the students' horizon of the working world, but still keep the students in areas familiar to them.

In all of the trips with elementary students, it worked out well to have a second adult, in addition to the driver, on our sixteen passenger bus.

I found that parents particularly enjoyed going on our trips. Often the visits to businesses or services were as new and interesting to the parents as the students. We were helping to expand their horizons also.

Recommendations - Junior High

The career trips that seem to be the most meaningful to junior high students were those based on special interests. Those students who had volunteered for work as library aides, A-V aides to those in special interest classes such as art or honors math have already expressed a liking for this kind of work. Trips were planned to show these students good examples of future job possibilities in these special interest areas. The library aides were taken to different types of libraries, the Seattle Public Library, Library for the Blind, Boeing Library, Art Museum Library and a book bindery. The A-V aides went to radio-television studios, both commercial and school studios, cable television services and film projection services.

The art students visited graphic art studios in educational television production and the very specialized work done in a college medical-dental school.

One math teacher wanted his students to have some idea of the vast numbers of jobs where the use of mathematics is essential. A college open house in the engineering school was chosen and proved to be an inspirational choice. The number of job potentials presented was staggering. The teacher was so pleased with the results of this field trip that he felt this was a must for his students each year.

Recommendations - Senior High

The addition of the Vocational Information Specialists to the high school staff in the last year of the CAM program seemed to be one reason for the increased interest in career exploration field trips at the senior high level.

I felt we had some very successful career trips using the combined skills of the VIS and the CRS. The VIS is abie to give the students and teachers background and follow-up material relating to each career trip. The VIS can be a substitute teacher to release classroom teachers to accompany teachers on career trips. Although the teachers presence isn't necessary to make the trip meaningful, it would be helpful if the teacher were aware of the business experience and could relate it to the classroom experience.

Teacher-student preparation was important in determining the success of any given career activity. The VIS could contribute much to the preparation in the form of advice, written material or A-V material.

We found it worked best if all of the scheduling for each school came from the teachers through the VIS's to the CRS. This way the VIS was aware of all the career activity in a service area and could lend support if needed. The CRS would then make all the arrangements with the businesses to be visited, giving a central source of contact for both schools and industry.

At the senior high level, as at the junior high, special interest trips brought the best response from people in business and from students.

Notices of career trips in such special fields as the medical services, women in engineering, vocational schools, and scientific research were posted in the career rooms. Only those with a genuine interest were encouraged to attend. These special interest groups were met with enthusiasm by the guides at our field trip sites. The guides were pleased that the students had some prior knowledge of the careers they were investigating. In some cases, the students could even speak the "language" of their fields of interest. This meant the guides could give more "in-depth" explanations and more information could be exchanged. It pleased the students to be so well received in the working world.

Both the VIS and the CRS agreed that full advantage should be taken of the open houses held on the college campuses in this area. The schools of engineering, fisheries, forestry, art, architecture etc., have unique displays illustrating the career possibilities in a manner that has much appeal to secondary students.

Qualifications and qualities of the Community Resource Specialist as developed in this program.

1. Should like people. This is a people job. Liking people is a must.
2. Ability to relate well with students, parents, teachers and administrators.
3. Have a good sense of humor, infinite patience, tolerance, and flexibility.
4. Previous experience working with students, K-12. (Outside of school setting this could be, girl-boy scout leader, pre-school activity, athletic activities.)
5. Awareness of basic teaching methods and techniques.
6. Prior knowledge of school curriculum.
7. Prior knowledge of community structure.
8. Ability to organize information, people and activities.
9. Ability to communicate orally and in writing.
10. Be qualified to drive school bus.
11. Ability to be both the bus driver and substitute teacher.

Perhaps the most difficult part of this job is playing the role of part time bus driver and part time substitute teacher. Students in our district seem to have definite images of each role. To ask them to accept a person who could be both driver and teacher is disturbing to some. The difference in my being accepted seems to depend partly on my attitude and partly on the orientation given to the students by the teacher prior to the trips. In those instances where the teacher prepared the students for the activity and discussed my role in this activity, the students came aboard the bus with an open mind and ready to make the most of such an activity. In the cases where no preparation was made, students sometimes were bewildered by the duplicity of roles. They felt a need to challenge each role before they could accept either. In these cases time had to be taken to create a desirable environment on the bus before we could start our career activity.

Differences in attitudes can be illustrated by the following examples. On one career activity, the CAM bus was taking a kindergarten class, teacher and parents to observe a Japanese cooking demonstration. As usual I accompanied the group. While we were watching, one of the students turned to me and asked, "What are you doing here?" Before I could answer one of the parents said, "It's alright, dear, even "they" like to see what's going on."

A delightful contrast is the teacher who boards the bus and introduces me to the students with a statement like, "This is Mrs. Harrison, she works in Career Education, and will be both your driver and guide today."

It is the recommendation of the writer that this position be continued from local funds. The rationale for these recommendations is

1. The district's stated commitment to career education.

2. There is only one person directly responsible for community resources development.

3. The maintenance of relationship developed over three years in the business community.

4. Enthusiastic support, even in a difficult financial setting, from teachers and students.

5. A relatively low per pupil cost.

In summary, it is recommended that

1. Career education at the elementary level concentrate upon a limited scope and sequence of cognitive objectives relating to the world of work, especially data-people-things, regional occupations, and parent-community occupations, and affect objectives which relate directly to the decision making process.

2. That it be recognized that the long term effects are not known at this time, but that career education is a substantive field of knowledge and equally important as other areas.

3. That the type and nature of direct expression be limited so that each student can participate, i.e. should every child have an opportunity to visit one industry.

4. That further attention be given to the unique career development needs of special population groups, for whom earlier decision making may be of value.

5, A sample "minimum" career education program is attached which stresses basic occupational information.

GRADE	TOPIC	CONCEPTS	TYPES OF RESOURCES	TIME
K	Awareness	Awareness of Variety of Occupations	Role Playing Hats, Posters	
1	Parents Occupations	Parents Work Variety of Occupations Life Style	My Career Workbook "When I Grow Up," Speakers	
2	Community	Job Characteristics	Field trip to nearby business "Airport Careers" Dictionary	
3	Clusters	Occupations Can Be Grouped Interdependency	Films, Kits, Workbooks	
4	Worker Skills	Introduction Data-People-Things	McGraw Hill Film Series Activity in each area (Kits)	
5	Work Values	Extend D-P-T Self Assessment	One field trip to business-industry	
6	Regional Occupations	Worker Traits, Change, Work Requirements	Bread & Butterflies Series One visit to Occupational Skills Center NW Careers	

Themes K-6

- Respect for all jobs
- Production of Sex-Racial stereotyping
- Work Habits (responsibilities)
- Most people will work
- Advantages and disadvantages
- Personal Skills

WORK SAMPLES EXPLORATION

I. Introduction

The Work Samples Exploration component was designed to make a major thrust toward the goal of

- providing each student opportunities to consider career opportunities by assisting in self-evaluation of the student's interests, abilities, and values relating to a variety of occupational roles.

The primary effort in this component was directed toward the development and implementation of a Work Samples Lab. A secondary effort was directed toward the development of related activities which could be used by classroom teachers and/or guidance counselors to supplement the student's experience at the lab.

II. Work Samples Lab

The Work Samples Lab (WSL), as originally conceived and subsequently developed in this project, represents an adaptation of techniques developed by vocational rehabilitation counselors. Through the use of hands-on, simulated work experiences, these counselors have developed and refined a system for assessing an individual's potential for performing various types of work. In the WSL these same techniques were used but with the emphasis shifted from assessment to exploration.

A. Theoretical Basis

The lab was developed according to a master plan which called for the development of nine work samples, including three each in the categories of data, people and things. Selection of this concept was a deliberate decision based on the conclusion that the WSL could best "assist" students in their exploration of occupations by providing them with the analytical skills and constructs with which to conduct their own exploration rather than trying to do the job for them. Students thus prepared could make sense of their own widening range of experiences and expanding exposure to jobs regardless of when they occurred.

During their two day visit to the WSL, each student participated in all nine of the work samples which were organized into three levels according to the degree of complexity involved in the work tasks. Each of the nine work samples is sketched out below:

1. Data Work Samples

a. High level - analyzing. Students analyzed a group of completed job applications (including letters of recommendation, etc.) and chose the three candidates they would most likely take the time to interview if they were a personnel manager.

b. Medium level - computing. Students completed a variety of computing exercises drawn from actual work situations including making change, split pricing, processing credit card charges and completing car rental agreements.

c. Low level - sorting. Students sorted mail by zip codes.

2. People Work Samples

a. High level - supervising. Students watched a pre-recorded video tape dramatization of a front-line supervisor counseling an employee about an absenteeism problem. Students then discussed the implications of the job of supervising.

b. Medium level - persuading. Students role played the part of a manufacturer's sales representative which was recorded on video tape and played back for critiquing.

c. Low level - serving. Students role played the part of a waiter/waitress which was recorded on video tape and played back for critiquing.

3. Things Work Samples

a. High level - precision work. Students prepared a layout template for production of a heat duct part using an actual part to work from.

b. Medium level - Manipulating. Students mounted three speakers in a stereo baffle using an electric drill and self-tapping screws.

c. Low level - handling. Students packed and unpacked miscellaneous kitchen items as if they were to be shipped.

B. Instructional Techniques

1. Individualized Instruction

Individualized student involvement in the data and things work samples was achieved through the use of Singer Graflex Caramates which use a synchronized combination of audio cassettes and 35 mm slides. This equipment permitted staff to keep the instructional program for each work sample flexible during its development, an essential factor which would not have been possible if filmstrip equipment had been used.

2. Small Groups

The nature of the people work samples required interaction between students as they role played as well as discussion during the critique of the video tape replay. Consequently, students worked in small groups of five or six students while participating in the people work samples.

3. Large Groups

Throughout the two days spent in the lab, basic orientation to the activities, several brief discussion periods and a 16 mm film were all presented in a total group situation.

4. Browsing Material

Though all work samples were designed to fit within a fairly structured schedule, students did complete their work at different times which allowed for time to browse through materials accumulated for that purpose. These include short filmstrips and cassettes, straight audio cassettes and a great number of brochures, occupational briefs and other printed career information.

C. Developmental Schedule

Original plans called for a progressive development of the WSL with three work samples being added each year until all nine were operational during the third year of the project. Actually, it was possible to develop three the first year, as planned, and the remaining six during the summer preceding the project's second year. As a result the lab operated at full capacity during both the second and third years of the project.

D. Students Served

1. Number Served

During the project's first year a major portion of the time was spent working out a rationale for development of the total lab as well as development of the initial three work samples. But by early March the program was operational and three hundred eighth grade students from Chinook Junior High School attended the lab before the close of the school year. Slightly over 1,000 students attended the lab each year during the second and third year of the project. Altogether, approximately 2,400 students attended the lab.

2. Grade Level

Prior to beginning the second year, project staff made the decision to serve ninth, rather than eighth graders at the lab. This decision was made after receiving advice from staff members of the Appalachia Educational Laboratory in Charleston, West Virginia, and consulting with the junior high principals and CAM Reps. This move was accompanied by a shift in the administration of the Ohio Vocational Interest Survey (OVIS) from the ninth to the eighth grade. (See details on the OVIS below, p. 25.) Basically, all agreed that this was a more logical sequence. Furthermore, experience after the fact suggested that the added maturity of ninth graders contributed to a more positive learning experience at the lab.

III. Related Activities

Throughout the life of the project, efforts were made to promote the development and use of career education activities at the junior high level which help students relate their experiences at the WSL to the total junior high curriculum. These fell into two groups, (1) classroom activities, and (2) guidance activities.

A. Classroom Activities

In many respects the classroom activities developed to compliment the WSL are closely related to the Infusion Component as described later in this report. It should be noted though, that the effort to develop these activities preceded the staff's decision to pursue an infusion strategy which did not occur until the second year of the project. Perhaps the greatest commonality was the difficulty getting teachers to act upon the idea of incorporating career ed concepts in their teaching activity, a point which is discussed in greater detail in the section on infusion.

Development and use of a Career Development Unit for Washington History represents the most successful effort to relate classroom curriculum to the WSL as most groups attending the lab did so as part of their Washington History class. During the second year of the project teachers used the unit with nearly 400 students. Another 650 students participated during the project's third year. In addition, other junior high staff, notably English teachers, adopted/adapted material from the unit.

B. Guidance Activities

Guidance activities described below represent only a part of the total guidance effort developed by CAM which is described in greater detail later in this report. Activities described below are included here because they were specifically implemented to compliment the WSL.

1. Hoffman Filmstrip Series

Over the course of the project, approximately 140 filmstrips and audio cassettes were purchased from the Hoffman Series. Fifty of these were assigned to the WSL for browsing purposes. The other ninety were organized into sets which were rotated among all of the junior high schools in the district along with small filmstrip projectors. The total system permitted each school to offer students a greater variety of titles to view than if they had tried to develop their own collections.

The Hoffman series were selected originally because of their brevity. They were not intended as an in-depth source of career information, but rather as a method of exposing students to the wide diversity of job opportunities which they should become aware of. Printed materials accompanying the filmstrips helped students relate each title to the Worker Trait Group concept as developed in the D.O.T.

2. Ohio Vocational Interest Survey

During the first year the Ohio Vocational Interest Survey was administered to 300 ninth graders at Chinook Junior High. As noted previously in this report, use of the OVIS was shifted to the eighth grade in most of the schools during the second and third year of the project. The OVIS was selected over other vocational interest surveys because of its interpretive emphasis on worker traits, including the data-people-things concept, which tied in directly with the objectives of the WSL. During the course of the project, approximately 3,000 junior high students participated in the use of the OVIS.

IV. Conclusions and Recommendations

Project staff have reached a number of conclusions and related recommendations pertaining to the development and operation of the WSL. These are presented below.

A. Positive Conclusions and Recommendations

1. The Data-People-Things Construct

The data-people-things construct has proven a workable theoretical construct for development and organization of lab activities. The single most notable weakness in the commercially marketed work samples kits was the absence of a unifying organization. Since it is impossible to provide students with a truly wide variety of samples to experience, even if the time scheduled for participation ran several weeks, it is essential that students develop a cognitive construct which they can take with them and apply to their future career explorations. The data-people-things organization with its emphasis on differences and similarities between jobs based on worker traits, has proven to be a workable construct.

2. Development of Local Materials

In addition to the above point, another factor lends support to the development of local work sample programs rather than purchasing commercial versions. Audio-visual materials can be selected to reflect the local labor market opportunities. Besides choosing jobs which illustrate basic data-people-things concepts, a point can be made to include a wide diversity of jobs from the local labor market. Many students, after participating in the lab mentioned that they were not aware of the great variety of jobs people worked at within the Seattle area. Commercially developed programs, aimed at a broad national market, will not provide this dimension.

3. Related Activities

The development and use of classroom related activities definitely enhance the WSL experience for students. As noted above, this has been a difficult area to implement. Nevertheless, it is important and worth devoting time and effort

to. The greater degree of classroom involvement in career education activities, particularly when running concurrently with student participation at the WSL the more students get out of their experiences at the lab.

Likewise, use of the OVIS and the Hoffman Filmstrips added another dimension to the student's experiences. The WSL can make a contribution alone, but that contribution can be enlarged and enriched when it is supported by related career education activities within the home school atmosphere.

4. Length of Lab Experience

A two-day lab experience proved to be about right in length. One day would have been much too short. On the other hand, students had absorbed about all they were ready for at the time in a two day session. Spreading the experiences out over a long period of time might also be a workable format; however, this creates scheduling problems at the schools. As it turned out, teachers did not seem to mind the fact that students missed two days of class. Extending that time might not be welcomed.

5. Appropriate Grade Level

Ninth graders did seem to become more involved in the lab activities than eighth graders. The junior high years are ones of fairly rapid growth, both physically and socially, and this probably accounts for the difference. In a program which was more selective about which students participated, this difference in performance might not be noted. But if a single grade level must be chosen for participation, ninth graders are probably the best bet.

6. Reasonable Cost

Cost factors turned out to be reasonable. Estimated costs for replicating the WSL run the neighborhood of $12,000.00 (not including space for the lab), and yearly operating expenses should not exceed $10,000. By serving 1,000 students or more per year, the actual yearly service cost per student should not exceed ten dollars. Detailed figures are presented below.

Initial Outlay

Major Expenditures to Present Nine Work Samples

14 Caramates (slide/cassette mach. (12 "Playback" models @$300 ea) (2 "Record" models @ $350 ea)	$4300
Videotape Recorder, Camera, Monitor, etc.	3300
12 Custom-made Carrels (mounted on surplus tables)	700
12 Sets earphones	75
Film and Processing	350
Work Samples Materials & Props	600
Total	$9325

Other Related Expenditures (Information Center, Large Group Activities)

"World of Work" film	$ 210
2 Hitachi filmstrip/cassette mashines	270
Worker-Centered F/S, tapes	450
Tape Recorder	50
16 mm projector and cart	500
Filmstrip projector and cart	300
Screen	225
Chairs	300
Pamphlet display racks	470
Storage racks	140
Total	$2915

Annual Operating Costs:

Lab Supervisor $6994.94 (6 hr/day x 4 day/ wk x $7.36/hr. x 36 wks)	$6994.94
Lab Assistant $2851.20 (6 hr/day x 4 day/ wk. x $3.00/hr x 36 wks)	2851.20
Repair and Maintenance	600.00
Total	$9210.24

B. Negative Conclusions and Recommendations

1. Equipment

At this time Singer Graflex is the only company marketing a synchronized slide/cassette viewer. Without this piece of equipment staff would have had a very difficult time developing local programs. But the equipment has not proven as durable as advertised when operated on a day-in and day-out basis. Adoption/adaption of the program could perhaps utilize filmstrip-cassette machines as many of the developmental problems have been resolved. There is currently a wider selection of this type of equipment on the market. However, much of it is also lightly made and may not stand up well under constant use. The money spent on repairing this equipment might have been more wisely used by buying better equipment to begin with (if it had been available).

2. Relationship to Available Career Information Materials

Unfortunately much of the current career information materials does not focus on the worker point of view as does the data-people-things construct. Most materials are organized around broad clusters which too often focus on the process and/or product and service which results from the work performed. Consequently, finding good supporting materials for students to explore has been difficult. This problem has been partially solved by using classification systems which tie the two approaches together, but it continues to be bothersome. However, we would not recommend abandoning the data-people-things construct.

3. Student Selection Process

Though student reaction has been basically positive, a number of students have reacted to the lab negatively, including the all encompassing comment "this is dumb!" A certain amount of this reaction comes with the junior high age when many students are under considerable peer pressure to reject, at least superficially, school activities. Nevertheless, it would help if a process could be developed for selecting only those students who are interested in participating in a hands-on exploration activity. This could be attempted through a volunteer system but it would in turn complicate the problem of conducting related classroom activities which, as noted above, do contribute to the overall impact of the WSL. At this point the problem seems irresolvable, but should be considered in any plans to implement a WSL.

4. Use of Role Playing and Video Equipment

As designed the WSL can accommodate up to eighteen students which proved a reasonable load for one lab supervisor prior to the introduction of extensive role playing and the use of video recording equipment in the "people" activities. Students need extra supervision and support to plan and carry through role playing activities, particularly when the time scheduled does not allow for "warm up" exercises to loosen the students up and get them ready for the role playing. Likewise, the use of video equipment requires extra instruction and supervision.

Fortunately, CETA funding was available to add a "lab assistant" to the operation during most of the second and third year of the program. Realizing that this was a precarious source of funding, extensive revisions were planned in the "people" activities which would allow them to continue without this extra supervision. During the last four months of the project it became necessary to implement these activities which were accomplished with reasonable success. It is recommended that the development of any WSL program involving role playing and/or video tape equipment take in to account the additional supervisory help required.

5. Evaluation

Finding instruments and techniques for measuring the impact of the WSL has provided a problem. Commercial instruments have not proven appropriate and much of the third-party evaluator's effort in this area has been spent developing a suitable instrument with varying degrees of success. (See the section titled EVALUATION.) Additional work needs to be done in this area.

CAREER VALUE RENEWAL TASK FORCE

I. Introduction

The Career Value Renewal Task Force was designed to make a major thrust toward the the district goal of:

> Providing each student opportunities to consider career alternatives by developing in him an understanding of the value and dignity of each person's work in creating a productive society.

The Task Force, comprised of thirteen lay and district staff members, was created and charged with the responsibility of (1) conducting a study of the district's goal statement dealing with value and dignity, and (2) making recommendations for implementation of their findings.

After a series of meetings spanning the entire first year of the project, the task force submitted their report (see Appendix C) which included the following recommendations.

- Adopt a new goal statement on Career Value Awareness.
- Take attitudinal surveys to measure CAM project effectiveness.
- Revise the district grading system and give more emphasis to self-growth and social mobility.
- Include in our curriculum materials which enhance a strong set of personal values.
- Form a permanent advisory board to help keep CAM informed and updated.
- Hold periodic workshops to keep Career Value Awareness programs continuous.
- Encourage students to reexamine their ingrained values regarding work in light of the fact that we live in a world where change is the rule rather than the exception.
- Establish an internship program permitting and encouraging teachers to gain experience in jobs outside the educational establishment.

II. Presentation to the Board

Due to the broad nature of most of the Task Force's recommendations, CAM's staff felt no direction action should be taken (except in those areas pertaining directly to CAM's program which are discussed below) without board approval. However, the board's busy schedule did not permit CAM to make its annual presentation to the board, including the Task Force's recommendations, until mid March of the project's second year.

Though board members reacted favorably to the report and accepted the recommendations for further study and action, no official action has ever been taken. This situation developed

primarily because of the extensive demands made on the board's time and energy by the crisis in school funding which has plagued many districts throughout the state including Highline.

III. Project Activities

Without specific direction from the board of directors, project staff did not feel it was possible to take action on any of the specific recommendations included in the Task Force's report. This statement should not be interpreted to mean that the project did not continue to address itself to the goal of fostering a sense of value and dignity regarding all work. Many of the materials developed through the infusion effort, described later in this report, touched upon the basic need to find work which is rewarding to the individual and contributes to his/her sense of worth. Likewise, instructional activities within the other major instructional components included this dimension in their examination of work.

Furthermore, among the goals established by the district, one speaks directly to "human needs." If CAM has not given self-awareness the central role in career education that has been advocated by many in a leadership role, it has been due to a conscious recognition that career education has neither a monopoly in insight in this area, nor a mandate to bear the major responsibility in this area.

IV. Conclusions and Recommendations

Value and dignity, like democracy and brotherhood, are accepted almost without question by members of our society as desirable goals. Defining them, though remains a problem. Agreeing upon what kinds of curricular activities will promote their achievement is even further from being solved. Concern in this area must be reflected in any career education program.

But the role of value and dignity has become very ambiguous in twentieth century America. Modern technology and means of production have brought drastic changes in the labor market and the way that vast numbers of people are expected to function as they go about earning a living. On the other hand, vestiges of a value system which originated under significantly different economic and social conditions continues to dominate our rhetoric about how people should feel and respond to their work.

Unfortunately career education advocates have not always contributed to clarifying this ambiguity. For instance, there is an all too apparent contradiction in the use of terms such as "the dignity of all work" and "dead end jobs." Some hard thinking needs to be done by career educators. Obviously they could begin by becoming a little more familiar with the realities of the world of work.

SKILLS TRAINING

I. Introduction

The Skills Training component of CAM was aimed at filling the district goal:

> Providing each student opportunities to consider career alternatives by developing his employment skills and competence to enter the labor market.

Basically CAM's Employment Skills component and the district's established secondary vocational education program are one and the same. As the district's Director of Career Development has submitted yearly detailed reports to the appropriate state agency, as required by law, CAM's yearly interim reports have merely summarized the major activity and accomplishments. This report in turn highlights those activities over the past three years.

II. New Programs

Over the course of the project seven new programs were introduced, as follows:

Year one

Hydraulics	-	Occupational Skills Center

Year two

Early Childhood Education	-	Evergreen High School
Horticulture	-	Woodside School
Electronics	-	Highline High School

Year three

Real Estate	-	Highline High School
Diversified Occupations	-	Highline High School
Early Childhood Education	-	Highline High School Glacier High School

In addition to these new programs, during the second year revisions were made in the grade 9 through 12 Home and Family Life program which qualified it for vocational education funding.

During the project's third year, planning for new programs has continued with the result that two new programs will definitely be offered next year, and two additional programs have received a go ahead from local advisory committees and are now awaiting state-level

approval. These include

Definite Programs

Cashier-Checker	-	Occupational Skills Center (definite)
Cosmetology	-	Offered through contracted services with Renton Vocational School (definite)

Awaiting State-Level Approval

Building Trades	-	Occupational Skills Center
Welding	-	To be contracted through South Seattle Community College

III. Total Growth

New programs alone do not portray the full growth of vocational education programs during the past three years. A comparison of vocational education enrollment figures, as expressed in full-time-equivalents, shows a steady increase in actual enrollment. It should be noted that this growth has occurred in spite of an overall decline in the district's secondary student population.

Year	FTE Enrollment
1973-74	651
1974-75	915
1975-76	1165
1976-77	1400 (projected)

Specific figures related to this growth pattern are included in Appendix D.

IV. Follow-up

Following district policy and state requirements, a follow-up of all vocational education graduates has been completed each year. An analysis of these figures reveals a fairly consistent pattern which may be summarized as follows:

33%	Employed in a job related to their training or pursuing related training
33%	Employed in a job unrelated to their training or pursuing additional unrelated training
33%	Unemployed, full-time homemakers, military service and unaccounted for.

The placement record of individual programs varies considerably and may be studied further in Appendix D.

V. Conclusions and Recommendations

Skills training opportunities at the secondary level must be considered as essential part of any career education program which claims to be a total K through 12 program. On the other hand, to consider traditional vocational education programs in the high school by themselves as an adequate secondary career education program overlooks the reality of the work and career patterns that many young people will actually follow. They provide opportunities to begin skills training prior to graduation for many students and thus make a significant contribution to the overall career education effort.

The extent of that contribution depends upon several factors. First, training programs must reflect real employment opportunities available to high school graduates. At the very least, they must provide initial training that can be followed up with post secondary training which in turn leads to direct employment potential. Secondly, the diversity of programs offered must be broad enough to meet the needs of a wide group of students. One or two excellent training programs, though they may meet the needs of a few students, do not constitute a preparatory component in a total career education effort.

Together, the programs which existed in the Highline School District prior to the implementation of CAM, along with those which have been initiated during the past three years, meet the criteria outlined above.

GUIDANCE

I. Introduction

The original proposal for this project called for both a (1) "placement systems" component at the senior high level, and (2) an emphasis on the "guidance role" in career education. As the project progressed these two thrusts have, in all practical terms, become one for a good reason. Although the term "placement" has traditionally been associated with the process of actually bringing students and jobs together, this step is often the last and culminating one in a total process that has been going on for some time, including: (1) making students aware of their own interests, abilities, etc.; (2) acquainting students with requirements, working conditions and related aspects of different jobs; (3) orienting students of both short-term and long-range labor market opportunities; and (4) informing students of the educational and training programs available and assisting them to become enrolled.

II. Career Guidance Staffing

Over the course of CAM's three years, project staff have taken several directions to the problem of developing a career oriented guidance staff. These are reviewed below.

A. Involvement of the Regular Guidance Staff

1. First and Second Year Efforts

During the project's first year efforts were made to involve the regular counseling staffs at the junior and senior high level in development of a career guidance thrust. Typical of a large district, the wheels turned slowly and the turning was hardly perceptible at times. But slowly momentum was gained and a strong in-service program developed during the project's second year under the leadership of a counselor's In-Service Committee with CAM providing staff assistance.

Highlights of that program included

a. Evening workshops. A series of four evening workshops were held between December and May, with programs presented by staff members of Employment Security and Green River Community College. The final meeting was devoted to reviewing the year's progress and discussing directions for the coming year.

b. Field trips. A series of mini field trips were organized and scheduled during working hours. These groups, which included teacher/administrator guests, averaged about ten in size, an arrangement which seemed to promote greater impact on the counselors. A total of thirteen trips visited nine different locations including:

- Boeing Plant II
- Boeing Auburn Plant

- Employment Security
- Green River Community College
- North Seattle Community College
- Clover Park Voc-Tech School
- Renton Voc-Tech School
- Bon Marche Distribution Center
- Sears Roebuck Distribution Center
- Associated Grocers Distribution Center

c. Committees. Four committees were established to discuss, review, and make plans as deemed appropriate. Committees included:

- Ohio Vocational Interest Survey
- Career Information System
- Career Classes
- Career Day(s)

2. Third Year Developments

In spite of the excellent program developed during year two of the project, momentum faltered under the pressures which a double school levy failure brought about, including impending cutbacks in the secondary counseling staff. This was indeed unfortunate, for if the guidance staff was to play a long-lasting leadership role it was essential that they stand on their own, with only minimal assistance from CAM, during the project's third year.

B. Career Information Specialists

Although CAM's staff did not abandon hopes to keep the regular guidance staff involved in career guidance, it became apparent that new staffing patterns might be the most effective way to spearhead the career guidance program. With this in mind, the position of Vocational Information Specialist (VIS) and staffed in each of the five high schools from local vocational education funds.

Although each VIS operates from a career resource center in one of the district's five senior high schools, they also carried a service area responsibility for the junior high and elementary schools feeding into their high school. Broad duties outlined in their job description include:

- Development, operation and maintenance of a high school career information center.
- Assisting staff to develop student learning experiences in career development.
- Assisting elementary and junior high schools to articulate a career development program.
- Identifying and coordinating the use of school and community resources to facilitate career guidance and placement.
- Assisting in the development of new vocational education programs.

During CAM's third year, the VIS's have made a definite impact on the total career education effort in the district, with particular emphasis on career guidance activities. In fact, the continued operation and success of each of the career guidance activities described in the following portions of this section has been in large part due to their hard work during the third and final year of the CAM project.

III. Career Guidance Delivery Activities

Over the course of the project, several career guidance delivery systems have been developed and implemented. These are reported below.

A. Career Resource Centers

During the second year of the project, career resource centers were initiated in two of the district's high schools. At Glacier High School the center was the natural outgrowth of activities conducted by a Community Resource Coordinator, but at Evergreen High School it was a totally new operation and was staffed part-time from the principal's regular personnel allotments. The success of these centers and the staff operating them played an influential part in the decision to create similar centers in the other three high schools and staff them with the new position of Vocational Information Specialist during the project's third year.

These career resource centers, though hardly an innovation introduced by CAM, have become the hub of an active career guidance program in each of the district's five high schools. It is in the resource centers that the VIS's have pulled together occupational and training information, hosted resource speakers and visitors and set up the computerized career information system when it came to their schools (see below). Besides their obvious value as a delivery system for career information, career centers have given the total career guidance effort a day-in and day-out visibility that keeps students aware of pending choices they will be making in the future.

Several VIS's have already made arrangements through the counseling and/or library staffs at the junior high level to establish career centers at that level too.

B. Ohio Vocational Interest Survey

During the project's first year, the Ohio Vocational Interest Survey (OVIS) was used on a limited basis in one high school and one junior high school. Staff response was positive and during the second year the OVIS was used in each of the district's secondary schools with approximately 2,000 eighth graders and another 2,000 eleventh graders being involved in its administration. Use of the OVIS during the third year continued on the same broad scale.

Among the variety of instruments that might have been used, CAM selected the OVIS primarily because of its direct relationship to the Worker Trait Group concept through its data-people-things organization. Staff wanted an instrument that would reflect the "worker-centered" orientation to career awareness and exploration.

This proved to be a wise decision as the Computerized Career Information System and the Worker Trait Group Filing System (see below) are organized around the same conceptual framework, thus providing a high degree of integration between the major career guidance delivery systems available to students.

C. Computerized Career Information System

Among CAM's most successful activities, none has generated more enthusiasm among staff, students and parents than the Computerized Career Information System. Developed by Jim Marble, of Clarke College, Vancouver, Washington, under a research grant from the Washington State Commission for Vocational Education, the CCIS is one of the most unique computerized career information systems currently operating.

During the second year of the project, the CCIS was field tested at each of the district's five high schools. Response was so positive that provisions were made to extend use of the computer during the project's third year through refinements in its operation and the resulting time required for a student to participate. Sharing one computer terminal among five high schools, the Vocational Information Specialists were able to serve over 3,000 students during the third year.

As noted above, the CCIS is developed around the Worker Trait Group concept. After each student completes an initial series of questions, the computer can refer them to any of the 114 Worker Trait Group descriptions which appear to be appropriate for further exploration as well as 239 specific job titles. Such an approach has the effect of first narrowing down the student's area of inquiry, which is essential considering the total number of job titles listed in the Dictionary of Occupational Titles, and then leading the student to expand his or her explorations to a variety of specific jobs related by common elements.

D. Worker Trait Group Filing Systems

Following the pioneer work done by the Appalachia Educational Research Lab, CAM has organized career information files around the Worker Trait Group concept. Through use of the 114 Worker Trait Groups most information can be quickly classified and filed. Likewise, retrieval becomes an easily followed procedure rather than a frustrating search as students try to guess connections between job titles and filing categories.

As students begin to use the occupational information files they can easily make connections between the filing system and their previous experiences with the OVIS and the Computerized Career Information System which are also developed around the WTG concept. Together they provide the student with a logical continuity as he or she pursues career information.

Each of the Career Resource Centers in the district's five high schools now have a Worker Trait Group filing system and several of the VIS's have begun work toward implementing the system at the junior high level.

patterns through the Vocational Information Specialist position seems to have proven a right one. Certainly more was accomplished through the five VIS's in one year than could ever have been hoped for from the regular counseling staff. However, maintaining a healthy and strong working relationship between the two groups in future years will be essential.

B. Career Resource Center

There is no doubt in the staff's mind that a single and highly visible point of focus is needed to make career guidance work at the secondary level. Career Resource Centers in one shape or another appear to be the most practical way to provide this visibility. However, working from the center, the VIS must take career guidance to the staff and students. They cannot wait for either of those groups to come to them. True, there will be a trickle of student traffic coming through the center, and a VIS could probably keep busy meeting the intensive needs of these few students. But the vast majority of students need to be brought into the picture too, and this can be done only through an active program that seeks them out.

C. Need for a Consistent Picture of the World of Work

Because the world of work is a complex world, it presents many facets. Consequently, those who try to describe it have taken different approaches. Some of these approaches seem more logical than others, but in the case of career guidance, with its emphasis on meeting the varying needs of different students, it has seemed important to CAM's staff to use an approach that focuses on the individual rather than the economic organization of work. Consequently, very early in the project, staff chose to pursue a worker-centered approach. The Worker Trait Group, as developed by the U.S. Department of Labor and adapted for use at the secondary level by the Appalachia Research Laboratory, has proven very useful for this purpose. As noted previously in this section, this organizational system provides a common thread running through major delivery implemented by CAM including the Ohio Vocational Interest Survey, the Computerized Career Information System and the Worker Trait Group File System.

Even had this system not been chosen as the dominant organizational structure, the staff still believes that it is important to select one major approach and try to unify a total program around it, not that a single approach will meet all career guidance needs. For instance, when students reach the point at which they begin entering the labor market it is necessary for them to become aware of how the economy is organized in terms of actual employment opportunities, and neither approach is going to be of much help to them. But in the exploration phase, when they are trying to compare their own emerging interests and abilities with the demands made by different types of work, it is important that they experience some consistency in the picture of the world of work presented to them.

E. Student Portfolios

During CAM's first year a study group of counselors spent nearly a week examining the possibility of developing a "career portfolio" for all secondary students. Though all agreed it would be a good idea, the project appeared more ambitious than any counseling staff wanted to initiate. However, under the leadership of one VIS the idea was revived and field tested during the project's third year.

From its inception the portfolio was conceived as a record that would belong to the student from beginning to end. Students will prepare the initial information in their folders under the direction of the VIS. As additional information becomes available, such as the students computer printout and the OVIS profile, these will be added. The folders themselves will be kept in the Career Resource Center where they will be available to the students whenever they wish to use them. Upon graduation the students will be free to take their portfolios with them.

Teachers wishing to infuse career activities into their classroom work may bring all of their students' portfolios to the classroom where students can utilize their personalized information as a resource. New materials developed as a result of such classroom activity can in turn become a permanent part of the portfolio.

Several other VIS's are already planning to implement the portfolio in their high schools next year.

IV. Recommendations and Conclusions

A. The Guidance Staff and Career Education

The term guidance, in whatever context, usually brings to mind the image of the school counselor, a rather natural reaction considering that counselors probably make up ninety-five percent of the guidance staff in secondary schools. Consequently, career educators tend to assume that if a career guidance program is going to be developed, it will emerge directly from the work of the counseling staff. This was certainly true in the case of CAM. However, this line of thinking collided rather quickly with reality.

Although secondary counseling staffs have grown dramatically during the past fifteen years, counselors have increasingly come under attack for doing an inaffective job. Perhaps this situation was inevitable. With counselors under pressure from parents, teachers and administrators, as well as their own professional objectives, to play a vital role in almost every aspect of the student's development, it is not surprising that the goals of guidance have far outstripped the available resources. Arriving on the scene late, career educators, including CAM's staff, have often met with less than overwhelming success when it comes to persuading counselors they have a central role to play in career education.

Considering these general factors, plus the impact of local funding problems and their effect on the morale of the counseling staff, CAM's decision to look to new staffing

INFUSION

I. Introduction

Though the five major thrusts planned in the original project did not include an emphasis on "infusion" by the end of the project's first year, staff became convinced that an effort should be made in this direction. This was partly due to our own experiences, but national leadership also played a part. Infusion was the new word found in all the career education literature, particularly the writings emanating from the U.S.O.E. We could hardly ignore the message.

II. First Year Activities

A. Identifying a Scope and Sequence

Late in the project's first year, after a commitment had been made to make an effort toward developing an infusion strategy, staff determined that identifying some sort of scope and sequence of career education concepts and activities was the first essential step. Promoting infusion without some guidelines would be tantamount to inviting pandemonium.

Working within a framework which progressed from the (1) project goals to (2) student objectives and then on to (3) curricular components, the staff developed an Infusion Chart which identified fifty-five topics which classroom teachers could infuse into their programs. In addition the topics were scheduled along a broad continum running from kindergarten through grade 12.

B. Infusion Workshop

Using the Infusion Chart as a focus point, a group of nearly twenty teachers were brought together for a workshop during the summer at the close of the first year to work on infusion projects.

III. Second and Third Year Activities

A. Infusion Notebook

During the second year plans were developed for a strategy based on Infusion Notebooks. Separate books were developed for each of the major levels - primary, intermediate, junior high and senior high. Each notebook contained appropriate ideas and/or material for career education activities in the classroom. These activities had been developed in the workshop mentioned above, selected and edited from materials gathered from other projects and developed through contracts with specific teachers.

Through the CAM representatives, each building was provided with at least one notebook and additional copies were provided for those building requesting them. Efforts were also made to explain the strategy to various groups including building administrators and staff. These efforts were conducted by project staff and representatives.

The overall success of the Infusion Notebook was minimal. A few teachers did use the materials extensively, and, perhaps more significantly, it did spur some teachers on to develop good units of their own. But for reasons which are discussed more fully under Recommendations and Conclusions below, the Infusion Notebook would have to be considered a failure.

B. Other Classroom Activities

In spite of the limited impact of the Infusion Notebook, and the questions which the whole concept of infusion promotes (these are discussed under Recommendations and Conclusions below), a great number of career education activities have taken place in the classroom during the second and third year of the project. Many of these classroom activities are related directly or indirectly to other components. They are mentioned here because (1) they are either truly infusion activities, or would be considered so by many career educators, and (2) a brief listing of them will help clarify some of the issues discussed in the following section dealing with conclusions and recommendations.

1. Elementary Level

   a. Early Vocational Awareness Kits. Some of these kits were designed to tie directly to particular grade level objectives within the total curriculum. Others can be used quite arbitrarily by teachers and often are.

   b. Community Resource Specialist. The field trips, speakers etc. arranged by the CRS are often a direct result of an on-going curricular activities. Other times they are part of a "careers unit" or special project which has been introduced without any particular curricular tie in.

   c. Building or Class Projects. Again, these projects may be directly related to established curriculum and objectives, or they may be independent and arbitrarily introduced.

   d. Bread and Butterflies. This nationally produced program has been very well received and implemented by the district's intermediate teachers. Some aspects can be, and are in some cases, directly related to curricular objectives. But the total series of programs are quite complete in themselves, and it would be more accurate to describe them as an "addition" to the curriculum rather than an infusion.

2. Junior High Level

   a. Washington State History Unit. This is definitely an attempt to relate career education to a specific course.

   b. English Units. These, like the Washington History unit, are a definite attempt to infuse career education.

c. English Elective. English skills are still a major concern, of this trimester class, but the length of the course seems to stretch beyond the concept of infusion.

d. Occupational Versatility Photography Unit. This unit definitely uses career education concepts as an organizational framework for a self-teaching photography unit in the industrial arts program.

e. "Discovery." This commercial material was in several settings, including an English class and a health class. It need not tie in directly with the on-going curriculum in either course to be valuable.

3. Senior High Level

a. Career Education Units. A number of teachers report using career education units in their classroom. In some cases the counseling staff, or career center supervisor, are brought into the classroom in conjunction with these units, and in one school the counseling staff takes over the eleventh grade health classes for a two weeks career unit. English teachers make up the largest proportion of teachers who do include a career education unit, with health and family-life teachers making up most of the balance of the group.

b. Career English. One high school offers a one-quarter Career English elective which offers students a chance to become involved in a series of sustained activities designed to explore occupations and relate them to personal attributes and needs.

c. Ohio Vocational Interest Survey. Administration of the OVIS in classroom groups has tended to spur some teachers into developing classroom activities which help the student explore the results. In most cases the counseling staff is also involved.

C. Role of the Vocational Information Specialist

As noted in the previous section on Guidance, the Vocational Information Specialist has played a role in promoting the use of career education activities and materials in the classroom. With the close of the CAM project, the continued inclusion of career education in the classroom will depend largely on the VIS.

IV. Conclusions and Recommendations

By the end of the project's second year, CAM's staff had struggled with the question of infusion to a near standstill. Consequently the second interim report included a rather detailed reflection of this experience under the section devoted to recommendations and conclusions. Since these thoughts have not changed significantly, and because the staff does consider them important outcomes of the project, they are included here again in substantially the same format as found in the second interim report. (They are also summarized in the Position Paper, Appendix E).

A. Infusion - What Is It?

What is infusion? The term has been used by both career education leaders and practioners with very little attention to exactly what the concept includes. However, a central concept comes through. Basically, infusion aims toward the development and incorporation of career education concepts and activities into the established subject area curriculums as currently being taught in classrooms at all levels. Futhermore, it is implied by the term itself that this will be accomplished by the spirit of the effort as much as the action. For instance, the term integration, which has been with education for quite some time now, refers to bringing together "separate parts and making one of them." On the other hand, infusion refers to the process of "filling or imbuing, as with a spirit." Perhaps such semantical differences are not important (but if not, why isn't the term integration used?). On the other hand, such subtle shades in meaning may account for some of the confusion surrounding infusion.

In addition to providing a rather murky definition of infusion, its proponents have also implied that it is (1) either the best, if not (2) the only way that career education can successfully establish itself in the school curriculum. Furthermore, these advocates usually claim that infusion of career education will somehow make the student more interested in classroom activities because he/she will now see their relevance to personal needs. But the needs referred to are often far in the future, a fact which seems to contradict the claim of relevance. Such assertions are offered without much supporting evidence, much like other assumptions which educators tend to latch on to and refuse to give up in spite of the fact that their validity is rarely proven (and sometimes disproven).

In any event, the question still remains, when is career education infused into the on-going curriculum rather than becoming a separate subject or process to be taught or integrated into the curricular program? For instance:

- Is a quarter or tri-mester English elective developed around careers infusion, integration, or simply the most logical place in the departmental organization of secondary schools for career education to get a footing?

- Is a program such as Bread and Butterflies, which includes fifteen separate films and related activities, infusion into the on-going social studies curriculum, or is it in fact an addition to the social studies curriculum?

- Is a four week unit on occupations in a Washington History class infusion of career education, or simply a broadening and extension of the class?

B. Some Potential Answers

CAM's staff does not believe it can give unequivical answers to such questions as those raised above. However, from our experience we would like some potential answers for consideration.

1. Classroom Activities Are Not Necessarily Infusion

The fact that a career education activity takes place in the classroom does not

make it infusion.

2. Infusion Is Not the Only Legitimate Approach

Career education activities can be integrated, squeezed into, or just plain added to the curriculum and be as successful, if not more so, than infused activities often are.

3. Class Curriculum and Educational Objectives Are Not One and the Same

Educational objectives are established in terms of what we want students to know or be able to do. Classroom curriculum is the structural organization we give to the knowledge and skills we think students need in order to reach the education objectives we have established.

4. Infusion May Be An Undue Recognition of the Status Quo

Infusion may be a way to avoid the fact that revisions in the total curriculum need to be made. Must students always be taught within the curricular framework we currently have?

5. The Current Curriculum Cannot Accommodate Career Education Through the Process of Infusion

First of all, much of the curriculum is included in the educational process for reasons beyond the fact that people will spend much of their life working. Attempts to relate career education to many of these other objectives such as citizenship, appreciation of the arts and an understanding of human nature often ends up distorting these objectives as well as missing the boat as far as career education is concerned. Secondly, career education offers a complex set of concepts and skills of its own, and the current curriculum does not offer appropriate touch points for including all of them via the infusion route. This is a point which many advocates of career education, who themselves appear to have a very shallow understanding of the world of work and its complexities, seem to overlook. Finally, to depend upon infusion as the primary delivery system for career education tends to present those concepts and skills which can be infused in a piecemeal method, often destroying a continuity which students need to grasp.

C. Two Recommendations

After reflecting on our experience with infusion, and having worked our way through the points raised above, CAM's staff would make the following recommendation relating to the use of infusion as a major strategy.

1. Less Reliance on Infusion

Infusion should neither be viewed as the best or only way to establish career

education in the curriculum. Infusion should not be abandoned as a technique where deemed appropriate, but we doubt that career education is likely to fail even if infusion as a major strategy does.

2. In-Service

It would appear that infusion has failed partly because classroom teachers have been asked to relate something to their subject area which they do not understand. As pointed out above, career education is a complex body of knowledge and skills. Only when they have a solid grasp of this complexity will teachers be able to do a good job of infusing it into their curriculum. Even this understanding may not assure that they will do so, but it does appear to be required before infusion can occur.

EXPORTATION

I. Introduction

Many exemplary projects fail to have a significant impact beyond the school or district where they implemented because no specific plans have been made for disseminating information. To avoid this problem, provisions for definite dissemination activities were incorporated in the project's original design. In the remainder of this section the major activities conducted for this purpose are briefly reviewed.

II. Publications

A. REPORT

Six issues of the REPORT, the project's official newsletter were published and distributed to a mailing list of approximately 500 people including district staff as well as a list of state and federal career educators. Each issue featured one of the project's major thrusts. (See Appendix F for a copy of the final REPORT.) In addition, a Delphi survey was conducted through the REPORT which examined some of the crucial issues confronting career educators.

B. Other Publications

Throughout the course of the project's three years a variety of publications were produced to explain and/or facilitate implementation of the career education program. Whenever feasible these publications were made available for distribution to other career education staffs throughout the state. As a result numerous requests were received, including several from cities far beyond the expected circle of influence. In fact, our farthest request came from Australia. Following is a brief review of the project's major publications.

1. A CAM Primer

This small booklet defined the basic concepts that were incorporated in the Career Alternatives Model project.

2. A Major Thrust Project

This small booklet described each of the five major program components. It was aimed primarily at district staff.

3. CAM Looks at the Local Labor Market

This booklet included a number of graphs and charts depicting the jobs available in the local labor market as compiled by the Washington State Employment Security.

4. CAM Presents Elementary School Materials

This document presented an annotated catalog of the Early Vocational Awareness packets and other elementary level career education materials available to district staff.

5. CAM Presents Secondary School Materials

This document presented an annotated catalog of secondary level career education materials available to district staff.

6. Infusion Chart

This chart, which laid out a scope and sequence of career education concepts and activities (see page 11 of the Position Statement, Appendix E) was distributed widely within the district. Numerous requests from outside the district were also filled and project staff displayed and distributed them at various state and national conferences.

7. CCIS Packet

A packet describing the Computerized Career Information System field tested in the district has been provided to a variety of interested parties throughout the state. It has proven an invaluable aid in summarizing demonstrations of the CCIS.

8. Foreign Language Packet

A curriculum packet on careers and foreign languages was entered into the E.R.I.C. System. As a result, a letter commending the packet was received from an executive of the Modern Language Association of America.

9. Bread and Butterflies

A copy of all supplementary curriculum materials developed for the Bread and Butterflies program by CAM has been forwarded to the following: (1) Kent School District, (2) Bellevue School District, (3) South Kitsap School District, (4) Renton School District, (5) Seattle School District, (6) Channel 9 Television Station, and (7) the Agency for Instructional Television in Bloomington, Indiana.

10. Career Education - A Parent-School Partnership

This booklet, prepared and mailed jointly by CAM and the district-wide Parent-Teachers-Students Association to 12,000 homes, introduced parents to the concept of career education and provided several suggestions for ways in which they could help their child think about careers.

11. Position Statement on Highline School District's Career Education Program

A position paper was developed by project staff and presented to the district's Instructional Division Staff as a point of discussion. The paper dealt with an analysis of the national picture, the local position and problem areas in career education. The paper has also been distributed by project staff at various state and national meetings. A request for fifteen from the U.S.O.E. was also filied.

12. Education-Work Linkages and Secondary Schools

This document, prepared by staff for discussion purposes within the district's Insiructional Division, summarized the current thinking in the area of developing linkages between school and work.

III. Visits and Presentations

Throughout the project's three years, staff have welcomed every available opportunity to disseminate information about the project through hosting visitors and making presentations. A summary of those activities follows:

A. Year One

1. Career Awareness Workshop

Staff presented a description of career education activities in the Highline Districts, including CAM, at a workshop on "Career Awareness in Elementary Schools," sponsored by the Central Washington State College in August.

2. Photo Display

A photo display of all career education activities in the Highline District was made in the foyer of the district's administrative center during the month of October.

3. WAVE

Staff made two three-hour presesentations to teachers at Franklin Pierce and Forks School Districts. They were in conjunction with the WAVE (What About Vocational Education?) Program sponsored by the State Coordinating Council for Occupational Education.

4. WSASD

A presentation was made before the annual convention of the Washington State Association of School Directors held in Spokane, Washington during the month of November.

5. ASCD

A display was mounted at the Washington State Convention for the Association of Curricular Development, ASCD, held in Spokane, Washington during the month of February.

6. Teacher Training Conference

Staff made a presentation on CAM to a conference held for representatives of teacher training institutions at Eastern Washington State in November.

7. Visitors

Nearly a dozen individuals or groups visited all or part of the project during the first year. These groups included classroom teachers, guidance staff and school administrators, as well as state and federal officials.

B. Year Two

1. Committee for Quality Education

The project director made a presentation on CAM before interested members of the Committee on Quality Education.

2. Washington State Advisory Council

The project director participated in a presentation on the topic "Career Education-Definitions and Agency Roles" made before the Washington State Advisory Councils for Vocational Education.

3. U.S.O.E. Mini Conference Follow-up. The project director, along with other state representatives to Ken Hoyt's mini conference held the previous summer in Washington, D.C., met with Dick Lutz, Supervisor of Career Education in the office of the Superintendent of Public Instruction.

4. Visitors

Visitors to the project during the second year included staff from the following schools and districts: (1) Renton Vocational Technical Institute, (2) Kent School District, (3) Thomas Jefferson High School in the Federal Way District, (4) Shoreline School District, (5) Wishkah Valley High School in Grays Harbor County, (6) Marion Intermediate School District in Salem, Oregon, and (7) Echo Glen, a state correctional school for young adolescents.

C. Year Three

1. Region X Visitors

The project director toured Mr. Phil Rockefeller, Commissioner of Region X,

and Mr. Carrol Hanson, Public Relations Officer for Region X, through the Occupational Skills Center and presented them with career education materials developed by CAM.

2. Federal Visitors

CAM, in conjunction with career education staff from Seattle Public Schools, hosted a group of twenty-four federal-level visitors, including congressional and executive branch staff. Twelve of these people spent the day touring the district and looking in on federally funded projects related to career education.

3. Northwest Apprenticeship Conference

The project's mini bus was used to conduct several tours of OSC for participants of the Northwest Apprenticeship Conferences which was held nearby at the Sea-Tac Motor Inn.

4. Other Visitors

Other visitors to the project during the third year included staff groups from (1) Clover Park School District south of Tacoma, Washington, (2) Bellevue School District east of Seattle, and (3) Great Falls, Montana.

IV. Extended Consultations

A. Washington Occupational Information System

Project staff have held several meetings with staff of the Washington Occupational Information System (a Department of Labor funded project) to discuss areas of common concern. The CCIS, which was developed under a grant from the Washington State Commission for Vocational Education, is available for use by the WOIS organization. However, to date, these meetings have not developed any specific areas of cooperative action though WOIS has secured a grant to do a comparative study of the effectiveness of the CCIS and the system which they have adopted from Oregon.

B. Blackfoot, Idaho

Project staff have worked closely with the staff of the Part D project in Blackfoot, Idaho which has adopted/adapted the work samples lab concept developed by CAM. On two occasions, Helena Kennedy, the Work Samples Lab Supervisor, who was largely responsible for developing the Lab, was able to travel to Blackfoot and work directly with project staff there.

C. Appalachia Educational Laboratory

Over the course of the project's three years, an exchange of ideas and materials had taken place with Dave Winefordner and his staff at the Appalachia Educational Laboratory in Charleston, West Virginia. Areas of common interest include the

development and implementation of the career education methods, particularly career information systems, based on the Worker Trait Group concept.

B. Recommendations and Conclusions

It is probably impossible to make any kind of exact determination regarding the influence a project like CAM has on other career education programs. But there is little doubt that unless project staff makes a determined effort to disseminate the fruits of their work, the influence felt will be limited. The time required to prepare and distribute newsletters and other publications, organize and make presentations and to host visitors may seem like an imposition. But without them the chances of making any impact beyond the small circle of influence directly affected by a project is almost nil. CAM's staff believes these efforts have been worth the time and effort even though their specific value may never be measured.

STAFF DEVELOPMENT

I. Introduction

Throughout the three years covered by the CAM project, staff development was a major concern and included as many groups as possible from classroom teachers to school board members. Although it would be impossible to document each and every activity, the highlights of this effort are reviewed in this section.

II. CAM Representatives

The concept of "change agents" was employed by the project as a means for maintaining liason within each of the district's fifty buildings. Although the project's master schedule for implementation called for only one high school service area to be involved the first year with two additional service areas being added during both the second and third years of the project, it seemed imperative that the project be viewed as a district wide effort from the very beginning. The concept of "change agents" was employed as a means of accomplishing this objective. These change agents, or CAM Representatives as they chose to be known as, were appointed by their principals and given the responsibility of (1) maintaining liason with the CAM staff and (2) offering leadership within their building as CAM became active there.

To introduce the CAM Reps to the overall project, an initial two-day workshop was held for the group. This effort was followed by an additional three workshop days spread throughout the first and second year of the project. During the third year the Vocational Information Specialists worked directly with the CAM Reps within their service areas which eliminated the need for district wide workshop days.

III. In-Service Activities

A variety of in-service activities, some aimed at special or limited groups and others directed toward all district staff, were conducted over the course of the project. These are reviewed briefly below.

A. Building Principals

Because building principals play a key role in the success or failure of any innovative program, project staff made a particular effort to keep lines of communication with them open. In addition, during the early phases of the project the project director made a point of meeting with the various high school service area principals at one of their regular meetings. These meetings gave the director an opportunity to outline project objectives and potential activities for achieving those objectives as well as opening the door for the principals to make their own contributions.

B. Building Staffs

During the project's first year, the CAM Reps were given the responsibility for making a general presentation to their faculty covering the objectives and proposed activities

of the project. In several cases these initial meetings were followed later by mini-workshops designed to involve faculty in developing and implementing specific career education activities.

C. District Instructional Staff

As members of the district's Instructional Division, the project staff attended all meetings of this group and made several presentations outlining the project's objectives and proposed activities. In addition, staff met on several occasions with subject area coordinators to explore areas of mutual concern and cooperation.

Also, the project director attended the weekly meetings for all directors within the Instructional Division. This on-going communication of project staff with other instructional staff was essential to the ultimate integration of career education into the district's overall instructional.

D. Board presentations

Each spring the project director has made a presentation to the district's Board of Directors. During these presentations various phases of the project have been featured, and it was heartening to note the board members interest in and concern about the career education program.

E. Gifted Education

Over the course of the project the project's assistant director, Bill Cox, worked closely with a Citizen's Advisory Group on Gifted Children and later a follow-up group called Friends of the Gifted. This work culminated in the submission of a U.S.O.E. career education grant for gifted elementary students which was funded during the 1975-1976 school year. This project, in conjunction with the Research and Guidance Lab at the University of Wisconsin, hosted a three-day workshop titled Career Education for Gifted and Talented which was attended by approximately 75 teachers and aministrators.

F. Vocational Information Specialists

At the beginning of the project's third year, a special two-week in-service program was provided for the five new Vocational Information Specialists which gave them an opportunity to become acquainted with both the CAM staff and develop a working knowledge of the program's major thrusts. A trip to the offices of the Washington State Commission for Vocational Education gave them a perspective on state-wide career education and vocational education efforts and several days at the annual conference of the Washington Vocational Association brought them up to date on the most recent developments in these areas.

As a follow-up to this intensive program, project staff have met with the VIS's on a monthly basis to discuss routine business matters as well as provide additional in-service. These meetings have included visits to several local post-secondary training institutions as well as guest speakers on pertinent topics.

G. College Extension Classes

Three college extension classes were offered to all teachers and administrators in south King County through either Western Washington or Central Washington State Colleges. These included:

- Concepts of Career Education
- Affective Career Education
- Career Guidance Competencies for Educators

H. Special Field Trips

Recognizing that many educators lack familiarity with the world of work, several field trips were scheduled for interested staff on state-wide workshop days. Trips included visits to the (1) Seattle Police Department, (2) The King County Juvenile Court, (3) The Washington State Department of Social and Health Services, and (4) selected sites on Seattle's commercial waterfront.

I. Mini Internships

A series of 31 one-day internships were arranged for staff members from Tyee High School for the purpose of acquainting them with the world of work. Companies visited included Kelly Girls Service, Boeing Company, Internal Revenue, King County Governmental Offices and Weyerhaeuser.

IV. Project Staff

Throughout the course of the project, project staff were involved in a number of staff-development activities at the local, state and national level. These are reviewed briefly in this section.

A. Local Level Activities

1. Visits to Other Districts

In addition to participating in the field trips sponsored through the counselors' in-service program and the in-service activities scheduled for the VIS's, project staff made several visits to local districts. Greatest interest centered around experience with career centers.

2. Channel Nine Advisory Committee

Bill Cox, assistant director, served on a career education adivsory committee for Channel 9, the local educational TV station.

3. Education-Industry Linkages

Chuck Judd, project guidance specialist, attended two local conferences dealing with education-industry linkages. The first one, "Cooperative

Education: the Emerging Manpower Resource," was sponsored by the National Commission for Cooperative Education and a U.S.O.E. grant. The second one, "Joining the Community Through Jobs - the Role of the Private Sector," was sponsored by the Puget Sound Economic Development Council.

As an outgrowth of this second conference, a local, non-profit organization has been formed titled Private Sector Employment. Project staff have met with the director of that group on several occasions to discuss areas of common concern and cooperation.

B. State Level Activities

1. State Advisory Council for Vocational Education

The project director has served as an active member of the Washington State Advisory Council for Vocational Education throughout the project's three years.

2. Washington State Personnel and Guidance Association

The project's guidance specialist has maintained active membership in the Washington State Personnel and Guidance Association.

3. State Plan

The project director and guidance specialist attended a state-wide conference sponsored by the Supervisor of Career Education in the Office of the Superintendent of Public Instruction to discuss initial steps in the development of a state career education plan. The guidance specialist then served on a smaller committee which developed the first draft of this plan.

4. State-wide Workshops

The project's assistant director attended state-wide workshops on elementary career education in both Seattle and Vancouver, Washington.

C. Regional and National Level Activities

1. U.S.O.E. Conferences

Project staff attended the following U.S.O.E. conferences:

a. Region X Directors. The project director attended each of the three annual conferences for directors of Part D projects in Region X.

b. Mini Conference. The project director attended one of the U.S.O.E. mini conferences held in Washington, D.C. during the summer of 1974.

c. Part C and D Administrators Conference. The assistant director attended the conference for Part C and D Administrators held in Dallas, Texas

during January of 1975.

d. Career Education Project Administrators. The assistant director attended the conference for administrators of career education projects held in Washington, D.C. during May, 1976.

2. Other Conferences, etc.

a. Visit to Arizona Career Education Projects. The project's guidance specialist joined three other career educators from the state on a visit to career education projects in the state of Arizona in October of 1973.

b. American Vocational Association. The project director attended the 1973 and 1974 annual AVA conferences and the assistant director attended the 1975 annual AVA conference.

c. National Workshop to Implement Change in Counseling and Guidance. The guidance specialist attended the National Workshop to Implement Change in Counseling and Guidance held in Washington, D.C. in April, 1975. This conference was sponsored jointly by the American Vocational Association and American Personnel and Guidance Association.

d. Career Education Policy Seminar. The project director attended the Career Education Policy Seminar held at George Washington University in Washington, D.C. during January, 1976.

e. Second Career Education Forum. The guidance specialist attended the Second Career Education Forum in Washington, D.C. during February, 1976. The theme of this conference was education-work cooperation.

f. NIE Experienced Based Conference. The director and guidance specialist attended the NIE conference fo career education staffs planning to write Part D grant applications for 1976-79 funding. This conference included presentors from the four experienced-based career education models funded by NIE.

g. Northwest Regional Educational Laboratory. The project director, guidance specialist, and one VIS each spent time at the Northwest Regional Educational Laboratory experienced-based career education model in Tigard, Oregon.

V. Conclusions and Recommendations

Although some staff development activities were aimed at specific objectives, many of them were broad in their desired outcomes and consequently impossible to evaluate regarding their long-range impact. Nevertheless, these benefits will probably be among the most important residual effects of the CAM project. Project staff would recommend that any career education project should have a strong staff development program.

PROJECT HIGHLIGHTS

I. Introduction

In a project of CAM's magnitude, many unique features have been welded together to produce a total impact. Selecting several highlights from among those features is a difficult process; however, project staff considers the three outlined in the remainder of this section as having been either very unique or essential to the project and consequently worthy of special attention by any staff considering implementation of a career education project.

II. World of Work Structure

A. Purpose

In the development of curriculum and scope and sequence guidelines or purchase of commercial material, care should be taken to encourage consistence in the presentation of career material to students. The labor market is a complex, many faceted organization. Numerous codifications have been developed and if some screening is not done by teachers or administrators, a confusing structure develops in an already complex maze of world of work definitions.

B. Population served

All students and faculty.

C. Description

We are dealing with quality of program. The market and literature describe numerous models of job clusters, worker trait groups, industry classifications, data-people-things jobs, areas of work, occupational classifications, etc. The administration should assume early direction with teachers to establish a consistent pattern that will guide curriculum development and purchase of instructional materials toward a single or pre-determined sequence of work classifications.

D. Cost/Transportability

If planning is done at the beginning of a school district commitment to Career Education, the time costs would be minimal and the saving in buying and developing material under established guidelines would be substantial.

III. Career Information Center

A. Purpose

To provide a facility and personnel to assist with career information and services.

B. Population Served:

Students, teachers and administrators in the high school and supporting junior highs and elementary schools.

C. Description

A room preferably located adjacent to the counseling offices staffed by an individual who has had work experience other than teaching. A person who has been a certified vocational teacher would offer a needed insight to the job. The services offered should include readily available pamphlets, brochures, charts, posters, occupational handbooks--material that is current and available to be given away. The person should serve in a resource role in assisting teachers in planning field trips and suggesting curriculum material that will infuse career exploration activities into the on-going program. Also with responsibilities K through 12, this person can offer leadership in developing a scope and sequence in the presentation of concepts, activities and curriculum.

D. Cost/Transportability

Personnel - $10/15,000 a year

Equipment - Initial (magazine racks, shelves, audio visual equipment) $1,500

Material and Supplies (initial) - $600.

Yearly costs - supplies and material - $300.

IV. Work Samples Laboratory

A. Purpose

To expose junior high school students to an organized variety of simulated hands-on experiences in different categories of work. The purpose is to give students a conceptual structure for looking at the world of work.

B. Population Served

Used successfully with eighth and ninth grade students and mentally handicapped secondary students.

C. Description

Students are bussed to a central location and are involved for two full school days. The group can have a maximum of 18 students. Each student spends approximately 45 minutes at each of nine work samples: three each in the job area that predominantly deals with data, people, and things. Within these categories a complex, medium and low level of tasks are considered. This can best be understood in the following matrix.

Task / Level	Data	People	Things
Complex	Invent/Analyze W.S.* Employment Interviewer	Understand/Supervise W.S.* Front line supervisor	Understand Machines/ Precision Work W.S.* Template maker
Medium	Recall/Compute W.S.*Care Rental Agent	Persuade W.S.*Mfg. Sales Representative	Operate/Manipulate W.S.* Assembler
	Copy/Compare W.S.* Mail Sorter	Transmit/Serve W.S.* Waiter/ Waitress	Feed/Handle W.S.* Furniture mover

*Work Sample

D. Cost/Transportability

See attached sheet.

BUDGET

14	Caramates (slide/cassette machines) (12 "Playback" models @ $300 each) (2 "Record" models @ $350 each)	$4300
	Videotape Recorder, Camera, Monitor, etc.	3300
12	Custom-make Carrels (mounted on surplus tables)	700
12	Sets earphones	75
	Film and Processing	350
	Work Samples Materials and Props	600
	Total	$9325

Other Related Expenditures

	"World of Work" film	$ 210
2	Hitachi filmstrip/cassette machines	270
	Worker-Centered filmstrips, tapes	450
	Tape recorder	50
16mm	Projector and cart	500
	Filmstrip projector and cart	300
	Screen	225
	Chairs	300
	Pamphlet display racks	470
	Storage racks	140
		$2915

Annual Operating Costs

Lab Supervisor $6994.94 (6 hr/day x 4 day/wk x $7.36/hr. x 36 wks)	$6994.94
Lab Assistant $2851.20 (6 hr/day x 4 day/wk. x $3.00/hr x 36 wks)	- 0 -
Repair and Maintenance	600.00
Total	$7594.94

Guidelines for Determination of Per Pupil

Costs for Exemplary Part D Projects V361123

Objectives

1. To utilize consistent assumption among the Region X Part D projects in order that meaningful comparisons can be made.

2. To facilitate exportation by isolating initial, developmental and maintenance costs.

Model Year 3 - 1975-76

ITEM	BUDGET	DEVELOPMENTAL & INITIAL COSTS	MAINTENANCE COSTS PRIMARY	INTER.	JR. HI	SR. HI	OTHER
Personnel	77,090		8,000	8,000	30,000	14,000	23,140
Staff Dev.	11,000		1,308	1,308	1,308	1,308	
Emp. Benefits	7,826		900	900	3,300	1,600	2,778
Travel	2,500		778	778	778	778	778
Supp. & Mat.	18,403		4,000	4,000	2,500	2,000	3,950
Communication	300						
Services	18,700		3,370	3,370	5,270	5,270	1,380
Prod. Of Report	315						
Equipment	3,000	2,300	200	200	100	100	100
Other Direct Costs	700						
Indirect Costs	4,322		860	860	860	860	866
TOTAL	144,156	2,300	19,416	19,416	44,116	25,916	32,992
Divide number of students served	23,000	23,000	6,000	5,000	6,000	6,000	23,000
Equal per pupil costs	6.27	.10	3.24	3.88	7.35	4.32	1.43

Guidelines for Determination of Per Pupil

Costs for Exemplary Part D Projects

V361123

Objectives:

1. To utilize consistent assumption among the Region X Part D projects in order that meaningful comparisons can be made.

2. To facilitate exportation by isolating initial, developmental and maintenance costs.

Model

Years 1973-76

ITEM	BUDGET	DEVELOPMENTAL & INITIAL COSTS	MAINTENANCE COSTS PRIMARY	INTER.	JR. HI.	SR. HI.	OTHER
Personnel	251,090	10,000	26,100	26,100	72,725	40,125	71,340
Staff Dev.	34,800		11,308	11,308	6,808	6,808	1,725
Emp. Ben.	17,862		3,600	3,600	6,000	3,600	3,314
Travel	9,600		1,498	1,498	1,728	2,028	2,478
Supp. & Mat.	39,603		8,910	8,350	7,175	4,500	9,350
Communication	1,350		75	75	75	75	275
Services	42,533		7,420	7,820	12,460	11,970	5,413
Prod.ofReports	515						
Equipment	24,500	13,500	575	825	6,875	1,425	1,700
Other Direct Costs	5,015				350		4,000
Indirect Costs	8,863		860	860	860	860	5,407
TOTAL	435,731	23,500	60,346	60,436	115,056	71,391	105,002
Divide number of students served	23,000	23,000	6,000	5,000	6,000	6,000	23,000
Equal per pupil costs	18.94	.10	10.06	12.09	19.18	11.90	4.57

V361123
FINAL REPORT

APPENDIX A

Includes

Item # 1 Original student objectives as outlined in the project proposal

Item # 2 Original procedural objectives as outlined in the project proposal

Item # 3 Time Schedule for project activities as outlined in the project proposal

Item # 4 Time Schedule for the 1974–75 School Year

Item # 5 Time Schedule for the 1975–76 School Year

Item # 1.

III. PROJECT OBJECTIVES

A. STUDENT OBJECTIVES

The student objectives for this project are derived from the five goal statements included in the Highline District's commitment to career alternatives. These are stated as desired student outcomes and are not cast in measurable terms. However, specific behavioral objectives for each of the following student objectives will be developed in cooperation with the third party evaluator as part of the evaluation process.

Of course not all of the following objectives are "original" to this project. A number of district staff members provided input and several publications were reviewed, most notably Objectives for Career and Occupational Development, published by the National Assessment of Educational Progress, Denver, Colorado. Those objectives marked with an asterisk (*) were taken from this publication.

The goals and objectives are as follows:

1. Goal: To provide each student opportunities to consider career alternatives by providing insight into his relationship to various facets of the world of work.

   Objectives

   Grade 3 The student will:

   *1. Be aware of the main functions of highly visable careers and occupations.

   2. Will know major ways in which occupations differ.

   3. Recognize that being a student is his present career.

   Grade 6 The student will:

   *1. Know which occupations are in the same field (cluster).

   *2. Know the major duties and required abilities of common occupations and occupational families.

3. Identify the interdependency between the many jobs in the culture.

Grade 9 The student will be able to:

1. Describe the changing nature of technology in relation to an occupational field.

2. Identify career hierarchy levels and educational requirements for entry when given a list of career clusters.

3. Recognize careers available to students which require knowledge and use of all basic disciplines such as mathematics, fine arts, science, and humanities.

Grade 12 The student will:

*1. Understand that technological, economic, and social changes result in decreases in the availability of some kinds of jobs and increases in others.

*2. Know possibilities for career advancement beyond entry jobs in different occupations.

*3. Recognize that persons must update their skills in such ways as securing additional training, re-training, reading job-related periodicals, and attending night school.

Grade 14 The student will:

1. Be able to describe positive and negative aspects of employment, community college, vocational institute, or four-year college training.

2. Be trained or directed toward at least one job-entry skill.

3. Be able to describe advancement possibilities in his or her chosen field.

2. Goal: To provide each student opportunities to consider career alternatives by assisting in self-evaluation of his interests, abilities and values relating to a variety of occupational roles.

Objectives

Grade 3 The student will:

1. Recognize that different jobs require different interests and abilities.
2. Examine various rewards for performing work.
3. Recognize that career selection may be based on one's avocational interests.

Grade 6 The student will:

1. Recognize that one's life style is strongly influenced by one's work.
2. Cite and compare reasons why people prefer certain occupations over others.
3. Perceive himself or herself as able to achieve skills in data, people and things categories.

Grade 9 The students will be able to:

1. Understand the necessity for planning and preparation in the choosing of a career.

*2. Understand the relationship between school curriculum choices and career planning.

*3. Recognize personal deficiencies while realizing that many can be overcome and thus do not necessarily preclude entry into desired training or occupations.

Grade 12 The student will:

1. Actively pursue part-time or summer work in order to better understand his perceptions of employment.

*2. Perceive own specific abilities that may affect pending career decisions.

*3. Become aware of own current interests and values that may affect career decisions.

Grade 14 The student will:

1. Describe his job performance, if employed, similarly to an evaluation of his performance by his employers.
2. Describe advancement alternatives, or lack of advancement alternatives, based on current skills and abilities.
3. Express his perception of his program of training, if in a further education or training program, as adequate or inadequate in relation to his abilities.

3. Goal: To provide each student opportunities to consider career alternatives by developing in him an understanding of the value and dignity of each person's work in creating a productive society.

Objectives

Grade 3 The student will:

1. Discuss how we talk about work at home, in the school, and on the playground.
2. Describe in positive terms, adults (parents, relatives, neighbors) who work.
*3. Recognize the value of own accomplishments.

Grade 6 The student will:

1. Identify persons who work for themselves, who work for others, and who work for no pay.
2. Describe potential problems which would face America if no one worked.
3. Describe positive consequences of work upon the society.

Grade 9 The student will:

1. Select "holding a job" as a desired goal when given an alternative of concerns.
2. Perceive vocational training as an acceptable role for any and all students who may desire that training.
3. Develop an appreciation for the work of producers of services and producers of goods.

Grade 12 The student will:

1. Identify how attitude, abilities, and experiences affect work performance.
*2. Understand why people have the attitudes that they do toward work.
*3. Evidence a significantly increasing tendency to elect skills training programs at the senior high level.

Grade 14 The student will:

*1. Know that the quality of his work may have an effect on the status of his vocation and profession.

*2. Understand the integral parts he plays in meeting societal needs because of what he produces, the services he renders, and the activities in which he engages.

*3. Experience intrinsic satisfaction from own accomplishments and does not require frequent feedback from supervisors (instructors) to achieve a sense of reward.

4. Goal: To provide each student opportunities to consider career alternatives by developing his employment skills and competence to enter the job market.

Objectives

Grade 3 The student will:

*1. Make change: total up own purchases; do very simple mental computations without figuring on paper.

2. Complete personal data card.

3. Follow printed directions to find business names and addresses in the yellow section of a telephone book.

Grade 6 The student will:

*1. Figure simple budgets.

2. Systematically arrange tools and materials for storage.

3. Be able to successfully manipulate the equipment, tools, and instruments included in the majority of EVA resource packages.

Grade 9 The student will:

1. Compare his work-sample performance levels with business and industry performance standards.

2. Complete a job application form.

3. Recognize the role of organization in getting a task or project completed.

Grade 12 The student will:

1. Be able to synthesize the knowledge, job skills, and attitudinal learning into a simulated or actual job experience.

2. Be able to develop a job resume'.

3. Feel competent in experiencing a job interview.

Grade 14 The student will:

1. Be trained in entry level skill,

   or

   Be in apprenticeship training,

   or

   Be successfully employed,

   or

   Be pursuing further training in a selected career.
2. Identify likely employers in his selected career area.
3. Describe job-future possibilities in his selected career area.

5. Goal: To provide each student opportunities to consider career alternatives by providing decision-making and planning activities as preparation for future training and education related to his life's work.

Objectives

Grade 9 The student will:

1. Identify or describe alternatives in career areas which are open should a student choose to leave school.
2. Be aware of sources of information about short-term manpower training programs available for youth.
3. Be aware that further schooling and guidance services are available.

Grade 12 The student will:

1. Identify major training institutions in the Puget Sound Basin.
2. Develop plans for entry into employment, military or further schooling.
3. Be aware of manpower and counseling services available after high school graduation.

Grade 14 The student will:

1. Describe advancement training available in his career field after initial employment.
2. Evidence a decreasing tendency to indicate dissatisfaction with career choices made to that point.
3. Evidence an increasing tendency to be employed or in an occupational training program.

B. PROCEDURAL OBJECTIVES

The degree to which the above student objectives are attained, and the extent to which the exemplary role of this project is fulfilled depends in large part on how well the support services operate. Therefore, procedural objectives have been defined to document the successful operation of these services.

1. Management Services

a. Personnel

(1) An administrative staff including a project director and two assistants will be appointed by the superintendent of the district.

(2) The administrative staff will define job requirements for all other staff positions.

(3) The director will interview applicants and hire qualified staff members.

(4) The director will delegate supervisory responsibilities to his assistant directors.

(5) The assistant directors shall supervise the activities of all staff members assigned to him and keep the project director informed of their progress.

b. Change Agents

(1) The administrative staff, in consultation with building administrators, will identify and select the change agents.

(2) The administrative staff will plan and conduct an initial briefing and feed-back session of three days duration with all change agents.

(3) The administrative staff will plan and conduct periodic review meetings with the total group and/or sub-groups as deemed appropriate and necessary by the project's progress.

c. Advisory Councils and Committees

(1) The administrative staff will establish guidelines for determining when an advisory council or committee is required or appropriate.

(2) The administrative staff will identify appropriate representation for each committee or council and select individual members.

(3) The administrative staff will plan and conduct periodic meetings of the various advisory councils and committees as deemed necessary and appropriate by the progress of the project.

2. Exportation Service

The administrative staff will implement the following steps.

a. Establishment of a working relationship with the Vocational Education Office (Coordinating Council of Occupational Education) that will provide for 1) utilizing their well-organized computer system of mailings which allows for selective mailings and random sampling, and 2) communicating with other projects throughout the state and beyond when appropriate.

b. Development of a system of progress reports including a:

(1) Second month report to explain the proposal and its over-all goals, including a delphi format in order to receive input from the recipients.

(2) Six month report to describe start-up problems as well as successes, including delphi results for second round.

(3) Twelfth month report to reflect on the first year's progress and problems, including delphi results for third round.

(4) Twenty-four month report to reflect on progress and problems encountered up to the two year mark, including delphi results for fourth round.

(5) Thirty-six month report to indicate accomplishments and describe materials available for export, and offer advice of an "If I had to do it over again. . ." nature, including delphi results.

c. Provision of a visitors' service to both encourage and conduct visits to the project.

d. Development of visual materials and hand-out materials and a schedule for personnel to exhibit these materials at appropriate local, state and national conventions, including those held by such associations as the American Vocational Association (AVA), the Association for Supervision and Curriculum Development (ASCD), The American Association of School Administrators (AASA) and the American Society for Training and Development (ASTD).

3. Evaluation Service

a. The project director will contract a third party to conduct the major evaluation of the project.

b. Within the first month of the project, the administrative staff will hold a strategy session with the third party evaluators to determine exactly how the Evaluation Plan outlined in Section XI of this proposal will be implemented.

c. The administrative staff will assist the third-party evaluators in conducting the first year evaluation.

Item # 3

IX TIME SCHEDULE

The specific activities of the first year are documented in detail under implementing procedures in combined sections 5 and 6, titled "Methods, Procedures and Materials." The activities of the second and third years are configurational and will be based on the experiences of the first year.

Month	EVA	Work Sample	Career Value Task Force	Employment Skills	Placement
1	Select staffs and organize advisory committees----------				
	Assist building principals in selecting change agent representative ----------				
2	Revise-update 14 resource packets	Program and facility planning		Organize Health Occupation cluster at O.S.C.	
3	Plan and implement over-all program of media support ----------				
4	Workshop for all change agents ----------				
	Development of 15 additional resource packets	Develop material in three cluster areas			Meet with post-secondary and manpower representatives
5	Develop a schedule of meetings with faculties and principals in the tyee service area.				
			Organize Task Force		
6	Inservice for packet use		Survey attitudinal influence toward work in present curriculum		Develop alternate procedures that offer expanded student opportunities for job placement
7		Meet with Jr. High staff in Tyee Service Area		Development of Bus. & Office cluster at Tyee	
8		Process pilot groups of students			Develop alternate procedures that offer expanded student opportunities for post-secondary training programs
9	Follow-up meeting with change agents ----------				
10	Preliminary meeting with representatives from Glacier and Evergreen service areas.				

Month	EVA	Work Sample	Career Value Task Force	Employment Skills	Placement
11	Third party evaluation activities				
			Identify curricular material that influences attitudes toward work		
12	Review first year critique and initiate program revisions. Expand services to Evergreen and Glacier Service Areas.				
	Development of additional 15 resource packets			Development of Public Service cluster at Glacier	
	Begin work on displays and simulation for mobile unit.				
14	Advisory committee/council meetings for up-date and evaluation reporting				
15	Plan and implement major change agent conference				
16	Inservice on new resource packets	Begin work sample program at O.S.C. Continue development of work sample stations	Task force report and recommendations on work value bias in curriculum		
17		Inservice with jr-high staffs in Evergreen-Glacier areas		Develop skills cluster at Evergreen H.S.	Critique job and educational placement service
18	Statewide progress reports				
19	Implement mobile unit project for elementary schools				
20	Inservice on EVA resource packets	Initiate two additional work sample stations			Plan and implement additional guidance information, material-handouts, and visuals.
21			Workshop dealing with positive action on the place of dignity of work in curriculum		

Month	EVA	Work Sample	Career Value Task Force	Employment Skills	Placement
22	Statewide progress report newsletter----------				
	Plan district-wide service by including Highline and Mount Rainier service areas.				
23	Third party evaluation activities				
24	Plan final revision and updating of existing 44 packets	Initiate two additional work sample stations.			
25	Plan and develop an additional five packets based on expressed needs		Follow-up on workshop - gather muterial and revise recommendations for final report		
26	Advisory committee/council meetings for up-date and evaluation reporting				
				Organize additional skill cluster or other developed program codification for Highline and Mt. Rainier	
27					Plan with post-secondary and manpower representatives a follow-up on the graduates of 1973-74 and 1974-75
28		Initiate two additional work sample stations			
	Statewide progress report report newsletter----------				
29	Inservice on EVA resource packets		Submit final report on status and recommendations of work value orientation in present curriculum, K-12		

Month	EVA	Work Sample	Career Value Task Force	Employment Skills	Placement
30.	Final major meeting of change agents			Develop recommendations for completion of framework for a balanced, comprehensive offering of employment skills at the OSC and 5 high schools	
31	Meet with third party evaluators to plan final project report.				
32		Initiate two additional work sample stations			
33	Advisory committee/council meetings for up-date and evaluation report				
	Inservice on EVA resource packets				Develop methodology for continued articulation with post-secondary and manpower agencies that will carry beyond project
34	Up-date price list costs for all materials for exportation of program				
35	Articulate with State Office to develop a system of distribution of materials after the conclusion of project				
36	Final third party evaluation report ----------				

Highline's Career Alternatives Model Project
Time Schedule for the 1974-75 School Year

Item # 4

Month	E.V.A.	Work Sample	Value Renewal	Skills	Placement	Infusion
July	Compile summer writing projects. Remove to kit materials.	Renew 1st year efforts Initiate revisions				Prepare existing samples in useable form. Relate district/project objectives
Aug.	Add career materials to catalog. Begin kit devel. 1-2	Initiate new work samples	Review position paper developed in 1st year.		Meet with placement committee	Initiate career information center at Evergreen and Glacier High Schools. Review objectives for small group tours. Develop request form.
Sept.	Small group CAM reps meeting. Develop participation contract or log	Begin lab serving four junior high schools		Begin skills program at Occupational Center	Develop placement package for counselors.	Develop 10 infusion samples. Begin "Idea Book" for each teacher with infusion ideas. Initiate tours. Maintain log. Initiate student questionnaire.
Oct.	Advisory committee. Small group CAM rep meeting. Begin Kit 3 and 4 Complete kits 1 and 2	Advisory committee	Advisory committee	Advisory committee	Advisory committee	Catalog and disseminate picture file.
Nov.	Contact CAM reps re contract Field test 1 and 2	Meet with Jr. High principals counselors re problems	Develop objectives for value renewal K-12			Via CAM reps, select trial class rooms for models. Evaluate as to concepts

(continuation of page 1)

Month	E.V.A.	Work Sample	Value Renewal	Skills	Placement	Infusion
Dec	CAM rep meeting Disseminate 1 and 2 Complete Kit 3 and 4					Report field trip information
Jan	CAM rep meeting Field test 3 and 4 Begin kit 5 and 6	Initiate 2 new work samples		Plan 1975-1976 skill preparation offerings.	Identify changes in placement which have occurred.	
Feb	CAM rep meeting Disseminate 3 and 4		Develop plan for accomplishing objectives.			
Mar	CAM rep meeting Begin kit 7 and 8 Complete kit 5 and 6	Meet with 1975-76 principals and counselors				Disseminate successful samples of infusion Package and disseminate successful field trip ideas.
Apr	Field test 5 and 6	Develop schedule for observation				
May	Advisory committee Complete field test 7 and 8	Outline new work samples. advisory committee		Advisory committee	Advisory committee	
June	Complete Pre-post data	Compile data from participants				

Month	Guidance	Management	Exportation	Evaluation	In-Service
July		Review 1st year critique and initiate revisions		Choose 3rd party evaluator for 2nd year.	
Aug	Meeting and guidance committee: Develop action plan and objectives.	Principals advisory committee		Sign contract with evaluator	Materials workshop for teachers and principals. CAM reps meetings
Sept.				Develop evaluation plan: Collect baseline data.	
Oct	Form parent advisory committee to examine role of parent-assistance of school	Develop participant log to measure accomplishment.			Begin Career Education Class/ Western Tech 494 through Initiate In-service program
Nov	Review of "Action Plan" re progress.				
Dec		Attend American Vocational Assoc. meeting	Reports to: USOE Reporter to state and national	Brief accomplishment report	
Jan	Parent committee				Begin career education class
Feb					

(continuation of page 2)

Month	Guidance	Management	Exportation	Evaluation	In-Service
Mar	Write "parent suggestions" pamphlet with committee			Brief accomplishment report	In-service day emphasis-Major Thrusts. 1. demo materials 2. tours 3. work sample try out for counselors
Apr					
May				Collect terminal data	
June			Reporter to state and national	Reports	Reports

Highline's Career Alternatives Model Project
Time Schedule for the 1975-76 School Year

Item # 5

Month	E.V.A.	Work Samples	Skills	Guidance & Placement	Infusion
July	Restore Kits, materials Develop three new packets or kits Modify as data from evaluation indicates	Review 3rd Party Evaluation of WSL		Revise career information system Elementary counselors design section for Bread and Butterflies workbook	Review status of Infusion-materials and processes Prepare Bread and Butterflies workbook
Aug	Update catalog order materials (non-kit) Community resource evaluation with principals-alternative procedures	In-Service for teacher's involved	Confirm spring registration	Finalize lease agreement for terminal(s) for career information system	Finalize strategy for Infusion in 1975-76
Sept	Develop master schedule for kits 1975-76 utilization Committee: special groups career ed needs.	Begin operation of WSL serving all nine junior high schools	Start of program at Occupational Skills Center and five high schools	Initiate career information system	Initiate implementation of Infusion strategy Initiate fall Bread and Butterflies series
Oct	Advisory committee meeting Implement ongoing community resoure program	Advisory committee meeting	Advisory committee meeting	Advisory committee meeting Initiate OVIS program	Disseminate career bicentennial packet to elementary teachers
Nov			Collect follow-up information on 1974-75 graduates		
Dec					

(continuation of page 1)

Month	E.V.A.	Work	Skills	Guidance &	Infusion
Jan	Develop three new kits	Initial planning for 4th year			
Feb	Develop procedures for instruction materials management of kits				Initiate Spring
	Final kit modification, for dissemination			Plan 1976-77 program in high schools and O.S.C.	
April	Advisory committee meeting	Advisory Committee meeting	Advisory Committee meeting	Advisory Commitee meeting	
May	Transfer materials and kits to district distribution system				Document Infusion examples
June		Completion of 4th year plans			

Month	Management	Exportation	Evaluation	In-Service
April	Quarterly Report	Conduct workshop on project activities and results - local administrators	Collect needed post test data	
May		Conduct workshop on project activities and results - teachers		
June	Inventory all equipment and supplies			

Month	Management	Exportation	Evaluation	In-Service
July	Finalize third year program based on second year evaluation	Print parent career education pamphlet	Finalize third year evaluation model Review 1974-75 data	Support Highline staff involved in cadre program at Central Washington College
Aug	CAM representatives meeting Mt. Rainier-Highline service area meetings	Distribute parent pamphlet to PTSA presidents	Finalize contract with 3rd Party Evaluator	Counselors'In-Service Committee Workshop
Sept		Organize timetable of presentations of parents pamphlet		New materials workshop elementary Initiate counselors' In-Service program for 1975-76
Oct	Quarterly Report	Publish REPORT	Collect needed pre-test data	
Nov		Develop model for career library packet		
Dec		Write and organize material for career library		
Jan		Final layout work for career library	Interim report	Career Ed - Gifted and Talented Workshop
Feb		Print and assemble career library material	H.E.W. review	
Mar		Conduct work shop on project activities and results - state administrators Publish REPORT		

Appendix B

Student Observation Sheet

Your name _____

Where did you go? _____

When did you go? _____

How many jobs did you see? _____

Name the jobs: _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

Choose your favorite job. Draw a picture of it.

Does this worker use tools? _____
(Yes, No)

If "yes" draw a picture of the tools.

Would you like to do this job? _____
(Yes, No)

CAM: PRI: CR 7

CAREER EDUCATION FIELD TRIP

Name _____

NAME OF BUSINESS OR INDUSTRY _____ School _____

Grade or Age _____

1. List three different job titles that describe workers you saw.

   A. _____ B. _____ C. _____

2. Most businesses or industries fit one of the following "clusters" of occupations. Circle the cluster that fits the business you visited.

Transportation	Fine Arts	Hospitality and Recreation
Public Service	Manufacturing	Health
Personal Service	Marketing & Distribution	Communications
Consumer & Homemaking	Marine Science	Construction
Agri-Business	Environment	Business and Office

3. The activities workers do can often be described as dealing mostly with DATA, PEOPLE, or THINGS. Here are some examples of jobs in these areas.

   DATA = accountant, writer PEOPLE = manager, barber THINGS = electrician, truck driver

4. For this visit, pick one worker and answer the following questions:

   A. Job Title _____

   B. Did the worker work mostly with DATA, PEOPLE, or THINGS? (Circle one)

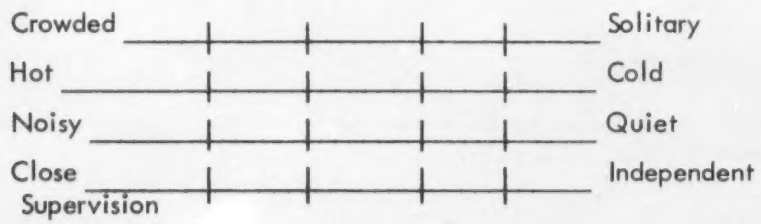
   C. Check any of the following descriptive words which describe what that one worker does. You may want to check words in all three columns, or several words in one column.

DATA	PEOPLE	THINGS
_____ organizes	_____ advises	_____ setting-up
_____ analyzes	_____ negotiates	_____ precision work
_____ compiles	_____ instructs	_____ controls
_____ computes	_____ supervises	_____ operates
_____ copies	_____ entertains	_____ manipulates
_____ compares	_____ persuades	_____ repairs, maintains
_____ judges	_____ speaks	_____ feeds a machine
_____ uses for decision making	_____ serves	_____ handles (lift, carry)

D. Which of these descriptions fit the place where the worker does his or her job. You may use more than one word.

_____plant	_____hospital	_____restaurant
_____office	_____inside	_____school
_____store	_____outside	_____other
_____laboratory	_____warehouse	_____

E. Which of the conditions are in effect where the worker is employed.



F. Which of the following descriptions of lifestyle fit this worker.

_____Would probably have friends in the same work
_____May have to work at night
_____Many company recreational opportunities
_____Usually has to "dress up" for work
_____May have the job only a short time (seasonal, unemployment, etc.)
_____Usually works as part of a team
_____Family may have to get used to different schedules--worker may be away from home part of time.

G. If you were interested in doing this job, what is one thing you are learning in school now that would be of help in getting or doing this job.

_____

_____

H. Do you think this job will exist in the year 2000? Why or why not?

_____

_____

I. What kind of training was necessary to do this job?

_____on the job training
_____a high school education
_____a special training program (secretarial, auto mechanic, etc.)
_____a college education in _____

5. Compared with other field trips you have been on, would you describe this field trip as

_____more valuable than most
_____about the same as most
_____less valuable than most

APPENDIX C

Report of the Career Value Renewal Task Force

HIGHLINE PUBLIC SCHOOLS SCHOOL DISTRICT 401

P.O. BOX 66100 SEATTLE, WASHINGTON 98166

ROBERT D. SEALEY, SUPERINTENDENT

CRESTVIEW ELEMENTARY SCHOOL

MAURICE BRIGHT, PRINCIPAL
16200 - 42nd AVENUE SOUTH
SEATTLE, WASHINGTON 98188
433-2273

June 21, 1974

Dr. Benjamin A. Yormark
C.A.M. Project Director

Dear Ben:

To say it has been a privilege and a pleasure to have served as chairman of the Career Value Renewal Task Force may seem a bit trite, but it's true. I deem it so for a number of reasons:

1. It has been an opportunity to expand my own knowledge and understanding through reading and associating with a wide variety of people who have an interest in career value renewal.

2. It has been satisfying to make some contribution in an area I feel is vital to public education.

3. It has been an experience which has brought home to me the complexity of prescribing what is necessary to accomplish one of the stated goals of the district.

One of the greatest surprises to me in working with this task force has been its philosophical compatibility. Even though the membership was picked with an eye toward getting as varied a group as possible, when it came to dealing with career education, it was amazing how close we were in our direction.

If I were giving hind sight in committee selection it would be to increase the number of people selected, which would allow for some drop out and also gain an even greater variety of opinion.

I think the general format of the first meetings being devoted to educating ourselves about the task and the last meetings assigned to accomplishing the task was successful. It might have proved helpful if we had started sooner in the school year and ended earlier.

The most difficult tasks lie ahead. It is quite often easier to give directions on how to reach a goal than it is treading the path necessary to get there. There is even greater difficulty if those giving directions are inexperienced.

Thank you for a most rewarding opportunity,

Maurice W. Bright

Maurice W. Bright

Report of the Career Value Renewal Task Force

of

Highline's Career Alternatives Model Project

The purpose of this report is to list and explain recommendations made by the Highline School District's Career Value Renewal Task Force (CVRTF). Acting upon charges to the Task Force from Dr. Ben Yormark, Career Alternatives Model Project Director, the CVRTF in an eight-month study conceived a number of ways to help overcome unfavorable attitudes, biases and prejudices towards various kinds of work and careers. This study will provide ideas necessary in planning a continuing career education program. The Career Alternatives Model Project (CAM) is being implemented by federal funds granted to the Highline School District.

In the course of the Task Force study sessions, the following problems were recognized and addressed:

1. How reasonable is the present district goal on Career Value? Does it need to be changed?

2. How can attitudinal changes which might be accomplished through CAM projects be measured?

3. Does dignity reside in the work or in the worker? What can be done to help students learn how to attain dignity and self-satisfaction from work?

4. What Task Force recommendations can be fulfilled in conjunction with fulfilling aims inherent in the districts' "Human Needs" goal?

5. How can career education be kept informed, updated and adaptable to changing career opportunities and labor market conditions?

6. How can administrators, teachers and parents be influenced to help continue a career value awareness program?

7. Do we, as parents, teachers, and administrators, have preconceived, ingrained values which distort our ideas about career education and prevent it from dealing with the realities of the labor market?

8. How can our preconceived values be changed so as to give all of CAMs' components a greater chance of succeeding?

In working towards solutions of these problems, the CVRTF recommends:

1. The district's goal statement concerning Career Value should be rewritten.

As published now, the statement is that our schools should develop in the student "an understanding of the value and dignity of each person's work in creating a productive society". The Task Force feels that the statement by "developing an understanding" in the student says that the schools are doing something to the student rather than with him as would be more effective. When values are only imposed externally, there is no experience gained in learning internal direction. This attribute will be necessary in meeting the challenges of today's rapidly changing world.

The phrase "creating a productive society was objected to because it necessitates educators making value judgments as to what is "productive". These judgments may not coincide with those of the students or parents. Also, the Task Force feels there should be less emphasis on society and more on the individual. In view of these things, the CVRTF suggests that the statement be revised to read as follows:

> "To provide each student opportunities to consider career alternatives by nurturing the student's understanding of how people receive self-satisfaction, value and dignity from their work."

This revised statement was a guideline to the Task Force in writing each of the other recommendations.

2. CAM could measure attitude changes by administering tests and/or survey instruments to students after they have participated in CAM projects. This practice is already established in the Early Vocational Awareness project, but since the attitudes of elementary children are weakly formed and subject to change from many influences, the reliability of such results are not stable. However, extending the use of such tests and instruments to projects involving junior and senior high students would produce results that CAM should be able to use in evaluating its success in producing attitudinal changes. For maximum benefit, these tests might be administered both immediately after the student's participation and at longer periods of time, for instance, at intervals of six months, one year and two years. Long term value received by CAM participants could be evaluated by making an annual study of a cross section of students who graduated 10 years previously. Both subjective and objective scales could be used here. This study could also help identify which things give dignity to individuals in particular jobs and careers. Also, teachers and administrators could be surveyed to determine their impressions of attitude change among students.

3. In discussing the problem of whether dignity resides in the work or in the worker, the consensus was that it primarily resides in the worker. For instance, it was noted that the workers' supervisors have it within their power to enhance or crush the workers' feelings of dignity and self worth. Several times during Task Force meetings it was noted that personality problems were the most common cause of a worker loosing or quitting his job. In this same vein, Dr. Giammatteo pointed out to the Task Force

that it is very difficult for many people to either choose particular types of jobs or receive satisfaction from them because to do so requires the person to break out of his subculture of family, friends and ethnic groups.

Often the above problems stem from an inability on the part of the individual to adapt to new situations and grow as a result of his expanded experiences. The ability to grow is difficult to teach as it involves both internal and external influences, perhaps too intangible to be included in any educational program. However, CAM projects could make a contribution to the process by exposing students to the rewards of self-growth through jobs and stressing the variety of opportunities available to them.

4. A number of CVRTF recommendations are directly related to the accomplishment of district goal statements under the heading of "Human Needs," particularly the statements dealing with (1) the development of a positive, realistic self-concept, and (2) the acceptance of individual differences in others. Regarding the first, it is believed by the Task Force that a person with a strong inner feeling of self-worth can bring dignity to almost any occupation. Consequently, it is important that our schools enhance these feelings as much as possible.

   One of the major obstacles to a universal feeling of worth is the district's grading system. It is difficult for a student to either feel much self-esteem or have high expectations for himself when he is continually awarded D's and F's for his efforts. A change in our grading system, that will be both more personal and have more emphasis on the positive, would be a step towards enhancing the dignity of the slower students.

   Another step in developing a positive self-concept could be taken by providing means to help students explore such questions as "Who am I?" Besides developing a positive self-concept, this could also enhance a strong set of personal values, a major prerequisite in having positive attitudes toward work. Instructional materials and methods which might be used for this purpose include the following examples.

   a. Guidance Associates filmstrips.
   b. Transactional analysis, reality therapy, psychocybernetics and Kohlberg's "Developmental Stages of Moral Reasoning."
   c. A "Science of Creative Intelligence" course (which speaks of the interdependence of all disciplines.

   The development of a "positive, realistic self-concept" is directly related to an "acceptance of individual differences in others." Becoming aware of his own makeup provides the student with a natural point of departure in understanding others. If he recognizes his own unique nature he cannot escape recognizing that others also have their own.

   By recognizing individual characteristics inherent in each person, generalities and stereotyped thinking is avoided. This would mean that students

would be taught to break away from stereotyped thinking towards occupations of different sexes, races, religions and economic levels. The accomplishment of these things would also help solve problem No. 8, concerning the changing of occupational biases in general, mentioned below.

5. As far as keeping career education informed, updated and adaptable is concerned, CAM could form an advisory board made up of employment representatives, knowledgeable teachers and administrators. This board could first, propound and encourage the achievement of the CVRTF recommendations, and second, keep informed of Bureau of Labor and Washington State Employment Service figures on employment trends. The advisory board could keep district career education leaders informed of any significant developments which might necessitate CAM program or project changes.

6. Parents and teachers can be influenced to help continue a career awareness program by the instigation of periodic workshops. CAM could sponsor these for teachers, parents and students, and invite community members who are influential in hiring and career counseling. These workshops could be co-hosted by CAM and such organizations as Project Equality, Friends of the Gifted and Neighborhood Youth Corps. Some examples of topics they might explore are:

    a. In-depth discussions of the items suggested by the advisory board described in recommendation No. 5.
    b. Meeting the needs of exceptional and "minority" students.
    c. Forming a partnership with the community to develop common processes of teaching career alternatives and attitudes.
    d. Preparing students, both as far as attitudes and skills are concerned, to move into new types of careers which grow out of our nation's scientific and technological developments.

    The people attending these workshops would be committed to a continuing Career Value Awareness program because they would have a personal investment in the time and effort involved in the creating and up-dating of it. Some CVRTF members even suggested that teacher attendance at these workshops be made mandatory at the rate of at least one of their workshop days every five years.

7. This CVRTF recommendation deals with those ingrained values which distort our ideas about career education and which do not conform to the realities of the labor market. One of these realities is that we are in a period of rapid change. Students must be made to realize that when choosing a life style they cannot rely on the model set by their parents because the occupations of the parents might disappear. Our schools should teach an awareness and an anticipation of change so the students can learn adaptability. The students should anticipate intervening in change not only to train themselves for it, but also to help insure that the long-range effects of change will be morally, environmentally and financially sound.

Two preceding recommendations are closely related to this one. In No. 3 the Task Force addressed itself to the need to encourage people to grow through their experiences, including work. In No. 6 a series of workshops were proposed as a means of involving students, parents and teachers in the objectives of career education. Obviously these recommendations, if implemented, would also have an effect on changing people's ingrained values regarding work and career education.

8. One factor which contributes to occupational biases in our schools is that teachers are generally biased in favor of teaching. They mostly had successful experiences as students and were thus influenced to stay in the academic world and become teachers. Although they may not be biased against other occupations, their silence about them does nothing to create favorable opinions in students' minds about anything besides teaching.

   To counteract this, CVRTF suggests that the district initiate an "experience program" where teachers would go to work during summers on an internship basis with jobs outside the field of education. This would introduce teachers to other areas of work besides teaching and at the same time help keep them up-to-date on what students will have to know to compete in the modern labor market.

SUMMARY OF RECOMMENDATIONS

The CVRTF has in this report stated a number of ways to overcome career biases and encourage students to be open-minded towards occupations of all kinds.

The recommendations include:

1. Adopt a new goal statement on Career Value Awareness.
2. Take attitudinal surveys to measure CAM project effectiveness.
3. Revise the district grading system and give more emphasis to self-growth and social mobility.
4. Include in our curriculum materials which enhance a strong set of personal values.
5. Form a permanent advisory board to help keep CAM informed and updated.
6. Hold periodic workshops to keep Career Value Awareness programs continuous.

7. Encourage students to reexamine their ingrained values regarding work in light of the fact that we live in a world where change is the rule rather than the exception.

8. Establish an internship program permitting and encouraging teachers to gain experience in jobs outside the educational establishment.

Review of Task Force, Membership and Activities

I. Makeup of the Career Value Renewal Task Force:

Members of the Task Force brought with them a rich background in terms of previous work experience. More than a hundred different jobs, ranging from fish cannery worker to service station attendant, were represented. Members were selected for the Task Force because of this diversity of work experience. It was felt that there would be great wealth in the variety of ideas they could contribute to the project. However, as the meetings continued over the eight-month period, it became obvious that the members' philosophies were surprisingly homogeneous, and most of the recommendations arrived at had unanimous approval.

The permanent members were:

Chairman, Maury Bright, elementary school principal

Staff Assistant, Chuck Judd, educator and CAM staff member

Project writer, Dick Carter, teacher and former public relations man

Gene Friese, district library coordinator

Pat Ronhaar, parent and teacher aide

Paul Dodsworth, administrative assistant of community mental health center

Wesley Busch, assistant in community education of Renton Area Youth Services

Rose Olson, educator, currently elementary counselor

Terry Farris, high school social studies teacher

Ian Metz, technical sales representative, Boeing

Doreen Johnson, high school student

John Taylor, Boilermakers local

Elizabeth Brigg, Alternatives Schools and Group for Quality Education

II. Plan of action of Task Force:

Members agreed that we should have approximately ten meetings this school year. About the first six of these would be educational and the last four would be devoted to making plans and recommendations.

III. Overview of meetings:

1. Nov. 14: Task Force members became acquainted with one another as well as with the job ahead. Mutual concerns about the work ethic, individual dignity and school curriculum were expressed.

2. Dec. 12: A panel consisting of labor market representatives and educational guidance staff representatives was presented to the task force. This was followed by task force small group discussions on the career education goals statement. It was concluded that dignity resides more in the worker than in the work he performs. Also, a person has to feel a sense of dignity in his own work before he can understand how others might feel a sense of dignity in entirely different work.

3. Jan. 9: After much discussion ranging in scope from the History of Western Civilization to the placement of a comma, a revised goal statement was agreed upon. The statement was listed as the first recommendation in the Task Force's Report.

4. Jan. 30: CAM's administrative staff made a presentation on CAM's total program. One basic theme of this was the "strategy of infusion" in which it was pointed out by Ben Yormark that each administrator, teacher and student must have a feeling that he personally has invested time and effort in the program. Only in this way can we expect the program to be infused and maintained. It was pointed out how CAM is concerned about how teachers feel about work of all kinds.

5. Feb. 14: Dr. Mike Giammatteo lectured on careers in relation to our lives in general. Under the heading of "Jobs", he spoke of:

   a. Finding - this depends on the job seeker's readiness. Most jobs are found by consulting friends. This helps nurture the job seeker's OK feelings since he is assured that he is staying within the culture of his peers.

   b. Keeping - here the worker experiences the world of "being" more than of "doing". Our keeping of jobs depends more on getting along with our co-workers than on doing our work well.

   c. Growth - sometimes a person has to break cultural ties with his parents and peers in order to find, keep and grow in his career. This should be taught in our schools. Proper mate selection is also vital to this. Growth should be the main area of career education.

6. March 13: General discussion was held on the problem of coming up with a program to implement our newly-formed career education goal. One major theme of the meeting was how to get teachers to adequately and enthusiastically present "career value renewal" and career education in general to the students.

7. The next three meetings of the Career Value Renewal Task Force were spent on discussing and agreeing upon recommendations submitted by individuals in the group.

8. May 22: Guests Chuck Hardy and Bill Guise presented material predicting future developments in global, national, and educational realms. They urged the Task Force to include these categories in our planning, and above all, pay attention to preparing students for drastic changes in the next few decades.

Submitted by the Highline Districts'
Career Value Renewal Task Force
Maury Bright, Chairman
June 20, 1974

APPENDIX D

Item # 1 Summary of Vocational Education Enrollment Figures

Item # 2 Summary of Vocational Education Follow-up Figures

Item # 1

VOCATIONAL HOURS SUMMARY

1973 - 1975

School & Subjects	1972-73	1973-74	1974-75	Totals
O.S.C.				
Breakfast	--	--	9,720	9,720
Clothing	10,260	8,640	7,560	26,460
Dental Assist.	--	11,340	15,660	27,000
Foods	36,180	30,780	14,580	81,540
Hydraulics	--	3,780	11,340	15,120
Marine Tech.	17,820	14,580	20,520	52,920
Med. Assist.	17,820	18,900	10,260	46,980
Plastics	19,980	22,140	21,600	63,720
Vis. Comm..	21,060	16,740	18,360	56,160
	123,120	126,900	129,600	379,620
Evergreen				
D.E.	8,550	14,580	10,800	33,930
Bus. Ed.	81,900	62,640	61,740	206,280
Service Sta.	6,480	16,200	8,640	31,320
Divers. Occ.	24,255	30,780	22,680	77,715
Home & Fam. Life	--	--	19,800	19,800
	121,185	124,200	123,660	369,450
Glacier				
D.E.	8,640	9,540	12,420	30,600
Bus. Ed.	47,340	39,600	43,020	129,960
FEAST	7,920	8,100	7,560	23,580
Automotive	5,760	11,880	12,600	30,240
Home & Fam. Life	--	--	10,710	10,710
	69,660	69,120	86,310	225,090
Highline				
D.E.	28,610	38,700	37,080	104,390
Bus. Ed.	66,780	58,950	72,540	198,270
Electronics	--	--	8,640	8,640
Home & Fam. Life	--	--	13,320	13,320
	95,390	103,590	125,640	324,620
Mt. Rainier				
D.E.	22,976	19,800	15,840	58,616
Bus. Ed.	74,520	73,980	62,640	211,140
Divers. Occ.	5,580	5,940	8,640	20,160
Home & Fam. Life	--	--	29,700	29,700
	103,076	99,720	116,820	339,776
Tyee				
D.E.	13,572	16,200	15,120	44,892
Bus. Ed.	54,900	40,680	55,440	151,020
Home & Fam. Life	--	--	22,770	22,770
	68,472	56,880	93,330	218,682

School & Subjects	1972-73	1973-74	1974-75	Totals
So. Seattle Campus				
Aircraft Maintenance	8,640	5,940	10,260	24,840
Junior High Schools				
Home & Family Life				
Puget Sound	--	--	14,040	14,040
Sylvester	--	--	18,900	18,900
Olympic	--	--	13,320	13,320
Chinook	--	--	16,560	16,560
Cascade	--	--	8,820	8,820
Sunset	--	--	9,360	9,360
Pacific	--	--	20,700	20,700
Seahurst	--	--	5,040	5,040
Glendale	--	--	10,620	10,620
				117,360
Woodside				
Horticulture	--	--	11,160	11,160
Home & Fam. Life	--	--	9,590	9,590
			20,750	20,750
GRAND TOTALS	589,543	586,350	823,730	2,020,188

8/15/75/fa

VOCATIONAL HOURS 1975-76

Evergreen		
Business & Office	66,780	
Radio/TV Media	5,040	
Diversified Occ.	17,280	
Service Station Attend.	8,640	
Home & Family Life	33,570	
Distributive Ed.	12,960	
		144,270
Glacier		
Business & Office	55,800	
Automotive	12,600	
FEAST	1,800	
Home & Family Life	27,360	
Distributive Ed.	14,580	
		112,140
Highline		
Business & Office	83,880	
Real Estate	1,800	
Diversified Occ.	16,200	
Electronics	8,640	
Home & Family Life	22,680	
Distributive Ed.	38,700	
		171,900
Mt. Rainier		
Business & Office	75,060	
Diversified Occ.	11,880	
Home & Family Life	35,370	
Distributive Ed.	16,020	
		138,330
Tyee		
Business & Office	67,950	
Home & Family Life	18,990	
Distributive Ed.	12,960	
		99,900
Aircraft Mechanic		16,900

Junior High School Home & Family Life		
Cascade	5,040	
Chinook	16,020	
Glendale	8,820	
Olympic	13,860	
Pacific	19,080	
Puget Sound	17,640	
Seahurst	9,720	
Sylvester	28,440	
		118,620
Woodside Home & Family Life		10,260
Occupational Skills Center		
Hydraulics	15,660	
Plastics	26,460	
Food Occupations	54,000	
Commercial Sewing	14,580	
Graphic Arts	36,720	
Marine Mechanic	25,380	
Dental Assistant	32,400	
Medical Assistant	31,320	
		236,520
Total Number of Vocational Hours 1975 - 1976		1,048,840

5/25/76/fa

OFFICE OF VOCATIONAL EDUCATION

1972 -

Vocational Followup of 1973 Graduates

Item #2.

SCHOOL	No. of Completions	Employment Full or Part Time %	Military Service %	Continuing School Full Time %	Status Unknown %
Evergreen					
D.E.	16	57	6	25	12
Bus. & Office	17	64	6	18	12
Automotive	20	65	10		25
Diversified Occ.	17	70	6	12	12
Glacier					
D.E.	15	47	7	27	19
FEAST	17	76	12	12	
Bus. & Office	31	84		16	
Automotive	12	68	16	8	8
Highline					
D.E.	54	63	7	30	
Bus. & Office	38	66		34	
Mount Rainier					
D.E.	39	61	3	33	3
Bus. & Office	32	78		22	
Tyee					
D.E.	30	67		33	
Bus. & Office	18	50		28	22
So. Campus					
Automotive	12	68	16	8	8
Occ. Skills Center					
Graphic Arts	26	73	8	19	
Marine Tech	31	35		65	
Plastics Mfg	28	79	7	7	7
Food Occ.	64	78	8	11	3
Comm. Sewing & Fashion	21	38		43	19
Medical Assistant	37	68		32	
TOTALS	575	66	5	24	5

RB/fa
12/12/73

Highline Public Schools

OFFICE OF VOCATIONAL EDUCATION

November 22, 1974

FOLLOWUP FOR 1973-74 GRADUATES BY PERCENT

Schools and Programs	Continuing School Fulltime	Employment-Related Job	Employment-Other	Unemployed	Status Unknown
O.S.C.					
Commercial Sewing	35	25	10	5	25
Dental Assistant	30	52	12	0	6
Commercial Foods (incl. Breakfast)	15	45	31	8	1
Other - Hydraulics	44	5.67	39	5.67	5.67
Marine Technology	41	24	32	3	0
Medical Assistant	43	35	11	7	4
Production Plastics	17	28	36	14	6
Visual Communications	31	38	19	13	
All Five High Schools					
Service Station	4	13	44	9	30
FEAST	7	0	14	0	79
General Merchandise	30	33	26	7	4
Auto Mechanics	25	36	29	4	7
Filing, Clerical Occ.	29	41	5	5	19
Diversified Occupations	15	44	20	8	13

Highline Public Schools

FOLLOW-UP 1974-75

	D.E.	B.&O.	D.O.	Service Station	Auto-motive	Aircraft Mech.	Elec-tronics	FEAST
Number of status unknown	8	5	3	4	3	1		
Number know in active mil. service	6		2	1		2		
Continuing school full time:								
Voc. Tech	3	15			1			
Comm. Coll.	21	17	3	2	3	8		
4-yr. Coll.	15	8	2		2	2	2	
Other	11	7	5			1		13*
Other reasons not available for employment	1	2	1					
No. known employed full time in occ. trained for or related	51	59	12	1	6		1	
No. known employed full time in other occ.	8	8	1	6	7	1		
No known employed part time (exclude those continuing school)	10	16	4	1	3	1	3	
No. known to be unemployed	11	16	6		4			

*FEAST students were all 11th graders last year; they are high school seniors this year.

3/25/76

Appendix E

POSITION STATEMENT

on

Highline School District's

CAREER EDUCATION PROGRAM

By:
Chuck Judd
and CAM Staff

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Introduction

"We desperately need new rites of passage from adolescence to adulthood, from school to work. But it will require a major national effort to design the new structures to bring this about.

Eli Ginzberg

At the end of the 1975-76 school year Highline's Career Alternatives Model will officially close shop. In a way this will mark a crossroads for the district. We may either gracefully forget our mistakes, greatfully accept our gains, and let it go at that. Or, we may look ahead and build on our experiences by planning new alternatives, selecting priorities from among them, and then seeking the resources needed to implement them.

Considering how closely CAM was designed with the district's Career Alternatives Goal in mind, the second route described above is the logical one. It would provide the kind of sustained continuity required if goals are to be converted into operational programs. It is in reality an opportunity for visable leadership in the task of promoting and implementing one of the major thrusts called for by Highline's Goals of Education.

It is with these thoughts in mind that we, the staff of the Career Alternatives Model, have prepared the following position paper.

Overview

From its inception several years ago, career education has grown without any clearly defined parameter. In large part this has been the result of a deliberate strategy on the part of the national leadership within the United States Office of Education (USOE). They reasoned that a definition of career education which evolved from the experience of local and state practitioners (stimulated by federal spending) would be both more theoretically sound and operationally practical than any model which was designed within bureaucratic offices. In many respects this approach is working. Certainly a great variety of career education programs have been developed across the nation which together provide a vast pool of experience that may be drawn upon in developing a working definition of

career education.

But this approach has also been frustrating to many career educators at the local level, including CAM's staff. During the past several years we have tried to keep abreast of the growing body of literature that has come from the field. We have also had an opportunity to sit in on many conferences and workshops on career education at the state, regional and national level. Throughout these experiences, we have been frustrated by several developments. First, the wide diversity of programs which go by the title of career education has become disheartening. One may call every animal in the barnyard a cow, if they wish, but a herd of sows will not make a very profitable dairy.

In addition to this wide diversity, we have also noted that career educators like to confuse the issues by their failure to make distinctions. Whether it be a definition of career education in general, a discussion of a limited topic, or a description of a specific program, career educators, (as do all educators) like to make lists in which they lump together all sorts of components ranging from broad goals to specific classroom techniques. We are not advocating hair splitting distinctions, but there are important differences between the nature of these various components as well as their relative importance and relationship to one another. For the benefit of all, career educators need to pay more attention to these differences.

In this position paper we have attempted to both refine our definition of career education and describe alternatives for a career education program in the Highline School District. To avoid some of the problems mentioned above, we have organized the paper within the framework of (1) Broad Goals and Student Objectives, (2) Curricular Content, and (3) Delivery Systems. Furthermore, in covering each of these areas we have tried to (1) relate our position to the national picture; (2) provide a supporting rationale for CAM's approach; and (3) identify those problems which have not been satisfactorily resolved.

Program Goals and Student Objectives

Any definition of career education must begin with a clarification of the program goals to be attained. From there it is both a logical and sequential step to move on to the business of establishing what sort of student objectives might be used to determine how well goals are being met. Program goals and student objectives are not one and the same, but neither can they be separated. They go hand in hand.

The National Picture

Over the past several decades a vocal group of visionaries have been telling us that most members of our society will not need to work in the future, at least not in the sense that we commonly use the word work. (It is not surprising that their voices are no longer as loud and clear as they were a decade ago.) Unfortunately, these prophets rarely get down to specifics, especially how and when the transition will take place. Consequently, many people, including educators, have become cautious in their outlook and concluded that in the foreseeable future most men in our society, and an ever increasing number of women, will spend a good share of their time and energy in the traditional role of worker.

Considering this conclusion, it would seem logical for public education to be concerned with preparing young people for their role as workers. But quite the opposite seems true. Recently, the leadership of the United States Office of Education (USOE) has pointed to the fact that many students are graduating from high school only to find there is a considerable gap between the world of public education and the world of work, a gap which they are not prepared to cross. Turning their attention to the problem, the USOE leadership has launched a massive effort to correct it. It is this effort, now spread to the state and local level where it has found support from both vocational and academic educators as well as the public, which goes by the broad title of career education.

Since its inception, the concept of career education has caught on very rapidly. Perhaps too rapidly, for as it has gained momentum it has also expanded rapidly in the scope it encompasses. Career education grew out of a recognized need - "to close the gap between school and work." To meet such a need is an ambitious goal, but nevertheless a limited one. The USOE leadership now speaks of career education as the concept which can both revitalize and reform American education. They have, in fact, staked out so much

"territorial responsibility" for career education that they have lent a deceptive truth to the statement that "all education is career education."

The development of appropriate student objectives to fit a program's goals is a difficult process under any circumstances. As the goals of career education have been "opened up" the task has become unmanageable. If career education is going to revitalize and reform American education there is no limit to the student objectives which might be considered appropriate.

CAM's Position

We have taken a more limited view of the role career education should play in the total educational program. In the beginning it was a concern with the individual's role as a worker, and how he/she got there, that formed the heart of career education. We believe it still does. This is not a reactionary defense of the "work ethic" which may or may not be dying, and which has probably been overrated as a motivational factor in work anyway. Nor is it an unquestioning acceptance of the capitalistic economy that has evolved in our country and the effect it has on our daily lives. It is, we believe, simply a recognition that in 20th century America most of us provide ourselves with the basic necessities of life, and whatever luxuries we may choose, by participating as workers in a very diversified world of work.

True, the worker may also be a spouse and a parent, a purchaser of goods, and a person with leisure time on his or her hands, as well as a voter. Nor is it surprising that one's work, considering the amount of time and energy it demands, often plays an interacting role with these other facets of life. But to define career education to include family life, consumerism, leisure activity and citizenship, or whatever else one might choose to include, seems to us to be overly ambitious and bordering on professional arrogance.

To prescribe such limits for career education does not mean that these other areas are not the appropriate concern of public education, nor that they are currently receiving all of the support and attention they rightly deserve. But we believe the national leadership which initiated the career education thrust did so in response to a limited problem - closing the gap between school and work. Furthermore, we believe it has been basically in response

to this problem that congress has funded career education. And finally, we believe that it is as a solution to this problem that the public has accepted and welcomed career education.

District Goals for Career Education. The Goals for Education, developed from extensive input from district staff, students, parents and the community at large, embodies our view of career education. By identifying four broad areas of concern - Human Needs, Intellectual Skills, Career Alternatives, and Civic Rights and Responsibilities - the district has recognized that education has multiple responsibilities and that no one concern can provide a single organizational focus for the overall program of education.

Student Objectives. But goals are only a beginning, a direction in which to channel instructional efforts. In the case of career education it is the individual student who must eventually "bridge the gap between school and work." It follows, then, that career education must be held accountable in terms of student objectives. Basically the question boils down to this: what is it the young graduate needs to know or be able to do if he or she is going to make the transition from school to work with a minimum of problems?

A Unified Plan of District Goals and Student Objectives. Working within the framework of the district's Career Alternatives goal statement, we have developed a set of twenty student objectives. These objectives will no doubt require revision and updating as circumstances change, as will the district's goal statements. In the meantime we believe together they provide useful guidelines for the development and implementation of a career education program that remains focused on helping students close the gap between school and the world of work.

To Provide Each Student Opportunities to Consider Career Alternatives by:

1. Providing insight into his relationship to various facets of the world of work.

   The student

   1. Will be able to describe jobs within a variety of structures.
   2. Can relate school learnings to activities performed by workers.
   3. Can describe broad factors in the economy which affect location and nature of work available.
   4. Can describe common job characteristics and requirements.

II. Assisting in self-evaluation of his interests, abilities and values relating to a variety of occupational roles.

The student:

1. Will have an adequate experience base on which to assess personal strengths.
2. Be aware of the relationship between job satisfaction and personal interests, values, and attitudes.
3. Can describe a variety of work-related life styles.
4. Can describe how one's personal viewpoint may affect perception of job advantages and disadvantages.
5. Can describe personal abilities and values as they relate to occupational interests.
6. Will accept an individual responsibility for his/her career planning.

III. Developing in him an understanding of the value and dignity of each person's work in creating a productive society.

The student:

1. Will be able to identify a variety of factors which might bring job satisfaction.
2. Can identify aspects of society's value system regarding work.
3. Will accept the changing role of women and minority groups in the labor force.

IV. Developing his employment skills and competence to enter the job market.

The student:

1. Will be prepared to take an entry level job, or enter a post high school training program.
2. Will be able to complete job securing activities appropriate to the work area of interest.

V. Providing decision-making and planning activities as preparation for future training and education related to his life's work.

The student:

1. Can describe the basic makeup of the local labor market.
2. Can identify opportunities in areas of her/her interest.
3. Can describe major trends in the labor market.
4. Can identify job/training opportunities.
5. Can describe typical patterns of movement in the labor market.

Problems

1. The difficulty of measurement. The extent to which goals and objectives are met is difficult to determine without adequate measurement instrument and techniques. To date our efforts to measure the impact of career education programs on students have not produced a great deal of significant evidence. This leaves us with two alternative interpretations. Either (1) our methods, materials and management are poor, or (2) the techniques and instruments used to measure impact are poor. A combination of the two is most likely the answer, and until the problems are identified and corrected progress toward developing an effective career education program will be limited.

2. Complexities of the labor market. There are many factors operating in the labor market which restrict the new-comers entry besides his or her own lack of experiences and ineptness. For instance, the impact that any career education program is likely to have on the total youth unemployment rate is probably minimal compared to broad factors in the economy such as government fiscal policy, the balance of payments, etc. Even specific vocational training programs do not create jobs. Quite the opposite, the availability of jobs creates the need for training programs. Unfortunately, too many career educators speak out blithly ignoring these kinds of facts, offering career education as a panacea to every hurdle currently facing the young as they move into the world of work.

   Considering the above problems, we can hardly expect complete success in the development of objectives which will truly make a difference when it comes time for the student to bridge the gap between school and work. Often we will have to be satisfied to know that at least we helped students avoid the undue frustration that comes when expectations are grossly out of line with the immediate realities.

3. Finding objectives that make a difference. Designing student objectives, even measuring them, may in the long run be easier than determining if they truly make a difference. There is little hard research evidence to indicate which sorts of knowledge and skills will make a significant difference in helping the student move from school to work. Already career educators have become so attached to certain objectives that it would be hard to wrench them loose if evidence showed them to be

inappropriate or insignificant. As career educators we will have to be ready to change our thinking as the evidence does become available, perhaps even abandon cherished ideas which seemed logical at one time.

Curriculum Content

Just as student objectives must be an outgrowth of well defined goals, curriculum must stem from student objectives. Thus, having determined how students should be able to perform if they are to be expected to "bridge the gap between school and work," the next question becomes: what can we teach them that will contribute to such performances?

The National Picture

Since there is a sequential relationship between program goals, student objectives and curriculum, it is not surprising that the "national picture" of career education curriculum lacks clarity. Diffused goals and objectives can hardly be expected to lead to a precise description of curricular content. When asked to elaborate on a career education curriculum, many in a leadership role reply with answers such as, ""career education is an attitude," or "career education is a process." Such statements, though spoken in sincerity and not intentionally evasive, do avoid the issue.

It might be added that many of these people believe the curriculum we have need not be changed, that nothing need be added, in order to accomplish the goals and objectives of career education. They have taken the position that if we will only relate what we are currently teaching to the world of work the problem will be solved. (This is related in part to the problem of relevancy, see pp 13.) And those who do advocate adding to the curriculum within the expanded goal of revitalizing and reforming education, are often promoting ideas that are hardly new. For instance, career educators like to talk about the importance of "developing a strong self concept" or "learning decision making skills" as if these were entirely new curriculum concepts and had not been among the "hot items" in professional journals for the last five to ten years. In summary, a failure to delineate goals and describe objectives can only lead to confusion when it comes to discussing curriculum.

CAM's Position

We would agree in part with the national direction, that much of what we are currently teaching can make a contribution to career education goals and objectives if a new effort is made to relate it to the student's eventual role as a worker. But we also believe there is an evolving body of knowledge and skills which can appropriately be called the "career education curriculum." At this point we do not feel qualified to offer a definitive description of this curriculum. On the other hand, the basic sources for such a curriculum are identifiable.

The World of Work. First of all, a career education curriculum must draw heavily from a knowledge of the world of work and how it functions, including both the micro and macro level of operation. It must include knowledge of specific opportunities in the local labor market as well as broad trends in the national economy. The world of work is, after all, the other side of the gap which students must cross over, and it must be brought into a far sharper focus for the student than has been the case so far.

Human Behavior. Secondly, a career education curriculum must include appropriate knowledge, skills and attitudes in the area of human behavior. In discussing our reasons for focusing career education on the individual's role as a worker, we recognized that work cannot avoid having an effect on the other facets of a person's life. And of course it is a reciprocal action. This total interactive process involves a wide variety of variables which in turn become arranged in diverse patterns frequently referred to as "life styles." Career education must help young people understand the role that basic aspects of human behavior play in this total process.

Drawing upon these sources, we have selected nearly one hundred "curricular components" and arranged them in a scope and sequence related to the Career Alternatives goals and student objectives described in the previous section. (See figure 1., p. 11). The result might be compared to those early maps of the new world which are found in historical accounts of the "age of exploration." The general shape of the continents are easily recognized, but any sixth grade student can see that it is riddled with mistakes and falls short of being an accurate replica of the current maps he or she is accustomed to. It should be remembered, though, that the first circumnavigation of the globe was achieved using such maps and that each voyage added new details until a reasonably true and accurate picture

of the new world was completed.

(Narrative resumes on page 13.)

GOALS	OBJECTIVES	CURRICULAR COMPONENTS	
To Provide Each Student Opportunities to Consider CAREER ALTERTERNATIVES by:	Upon completing a K thru 12 Career Education Program, the STUDENT:	elementary	secondary
Providing an insight into his relationship to various facets of the world of work.	1. Will be able to describe jobs within a variety of structures 2. Can relate school learnings to activities performed by workers 3. Can describe broad factors in the economy which affect location and nature of work available 4. Can describe common job characteristics and requirements	Job families or clusters Levels of responsibility Workers who produce goods Workers who produce services How occupations relate to data, people and things The need for communication in all jobs Use of numerical skills in jobs Relationship of specific skills to adult work -- microscope, reference work, teaming Geographical locations determine kinds of work Emerging occupations in the economy Advantages and disadvantages of careers Parents' occupations Special training needed for many careers Roles of school workers Job characteristics -- repetition, weather, hazards, physical stamina	The role of organized labor in the economy The role of management in the economy Career opportunities for a person with knowledge in a specific subject content Groups that control entry and progression into the labor market Local factors which affect current job openings -- Boeing layoff, seasonal employment Worker temperaments appropriate to a variety of jobs Training and licensing requirements
Assisting in self-evaluation of his interests, abilities and values relating to a variety of occupational roles.	1. Will have an adequate experience base on which to assess personal strengths 2. Be aware of the relation between job satisfaction and personal interests, values, and attitudes 3. Can describe a variety of work-related life styles 4. Can describe how one's personal viewpoint may affect perception of job advantages and disadvantages 5. Can describe personal abilities and values as they relate to occupational interests	Experience in role playing occupations Experiences with simple tools -- hammer, magnifying glass, folding ruler Experience in teaming, assembly line, customer, supervisor roles Variety of rewards and satisfaction in work How worker attitudes vary in differing occupational groups Variety of possibilities open to individuals Life style differences - night work, travel, limitations in leisure Advantages and disadvantages of careers Parents' influence career choice Career perceptions based on individual potential	Experience with more complex tools Experience in human relations skills -- decision making, superior-subordinate, confrontations Selection, direction, management and evaluation of own time in work environment (occupational versatility) Feed back regarding personal strengths and weaknesses Instruments of assessment Experience in data, people and things (work samples) The influence of others on career choice How an individual's value system will affect career choice Relationship of economic rewards to life style Work which fits personal choices of life style The influence of others on career choice The changing nature of career commitments Variation within an individual's life work pattern Relationship of family climate and job satisfaction Relationship of leisure interests to occupations Occupations which relate to personal abilities, skills and interests That individuals can learn to perform adequately in a variety of occupations
Developing in him an understanding of the value and dignity of each person's work in creating a productive society.	1. Will be able to identify a variety of factors which might bring job satisfaction 2. Can identify aspects of society's value system regarding work 3. Will accept the changing role of women and minority groups in the labor force	Role of work in the community Attitudes of individuals concerning their specific jobs Family benefits derived from work Different people like different kinds of work Benefits to society from familiar jobs Role of work in American culture Interdependency of jobs Men and women assume similar work roles Individuals with variety of ethnic backgrounds do similar jobs Most women assume work roles outside the home	Relationship of personal values to job success Types of needs fulfilled by work How an individual's value system affects occupational choice Recognition of "work" as a probable part of life style The changing work ethic Role of women is changing - legislation re-entry, % of women working Problems of equal employment opportunities Knowledge of an employee's rights and responsibilities
Developing his employment skills and competence to enter the job market.	1. Is prepared to take an entry level job, or enter a post high school training program 2. Is able to complete job securing activities appropriate to the work area of interest	Experience with simple tools -- transit, stethoscope, saw Need for academic skills in job seeking Relationship of attitudes concerning dependability, tolerance, and adaptability to worker responsibility	Experience with more complex tools - jig saws, strobe lights, calculator Job opportunities for people not finishing high school Enrollment in preparation program and/or appropriate course selection for career goals Experience in human relations skills - reaping, analysis, change, confrontation, team effort Basic employment survival skills - dress, safety, attendance Experience in paid or voluntary service Awareness of different job securing activities -- interview, resume Experience in patterning appropriate job seeking activities - interviews, applications
Providing decision-making and planning activities as preparation for future training and education related to his life's work.	1. Can describe the basic makeup of the local labor market 2. Can identify opportunities in areas of interest 3. Can describe major trends in labor market 4. Can identify job/training opportunities 5. Can describe typical patterns of movement in labor market	Geographical locations determine kinds of work Basic industries in Washington state Effect of social changes in creating new jobs Effect of technology in creating and eliminating jobs	Child and women's labor laws Knowledge of student occupationally related organizations -- DECA, VICA, Jr. Achievement Understanding of occupations in Washington state labor force - salary, openings Employment opportunities while still in school Relationship of subject choice to career goals Specific job opportunities for persons with knowledge and skill in a particular subject area. Emerging occupations Many workers will require retraining during their working years Futurism and the world of work Training opportunities in high school That there are many routes to job entry Training opportunities in post high school institutions Sources of occupational information Informal job entry routes Formal job placement services Career commitments are often of a changing nature Ways in which planning can assist movement Avenues for growth and development in occupations -- career ladder, career lattice

Problems of Curriculum

1. Staff background. Because a knowledge of the world of work is a vital part of the career education curriculum, career educators who are not well grounded in this area are hardly prepared to help young people explore its terrain. This has been one of the most pressing problems facing career education managers who (including ourselves), are trying to develop sound programs. In too many cases we have been asking that career education learning experiences be developed and provided for students by staff who lack sufficient background in the world of work and its complexities. Or, equally detrimental if not worse, by staff who may be familiar, from personal experience, with one small corner of the forest or plain and are interpreting the whole landscape on the basis of that limited experience.

   Unfortunately, just as their lack of familiarity with the world of work may create problems, a tendency on the part of educators to lean toward the humanistic factors involved in a situation often leads them to overemphasize the importance of human behavior in the career education curriculum. As a result the student may end up with a lopsided picture suggesting that he/she need only take into account his/her personal values and desires, or even ability, in selecting a job, as if the labor market didn't exert its own selection process quite independently of his/her wishes. It has taken public education a great deal of time and energy to break away from the "college for all" fiction that has dominated the scene since World War II. An undue emphasis upon "personal fulfillment through work," without the ability to deliver such jobs to all who may want them, could lead to an equally misleading model.

2. Lack of scope and sequence criteria. Since career education is only one of several major goals adopted by the Highline District, obviously the amount of instructional time devoted to it must be limited. On the other hand, the world of work and human behavior, as touched upon above, are both areas of great breadth and depth. Consequently a selection process must take place. At this point we simply do not know which facts, concepts, process, etc. will make the most difference in terms of achieving the student objectives outlined for career education. (A secondary aspect of this problem deals with the question of which part of the career education curriculum should be

taught to all students and which should be aimed at selected groups of the student population?)

Even if components of the curriculum could be selected with some degree of certainty regarding their contribution to student objectives, we cannot yet say when they might be most profitably taught. There has been little systematic analysis of such curricular components in light of what is known about child development and the learning process. (The related problem of how this curricular content can best be incorporated into the total instructional program will be dealt with in the next section.)

The lack of criteria for answering scope and sequence questions such as those posed above has already led career educators to take positions which may be difficult to back away from should it be necessary. For instance, currently "K thru 12" has become one of the more deeply entrenched cliches used by educators. Hardly an innovation is suggested, regardless of how reactionary or outlandish it may be, but what the originators are immediately assuring us that it must of course entail a total "K thru 12" process and program if its potential is to be fully realized. Career education is no exception.

In all likelihood this line of reasoning does apply to career education. But we think it should at least be kept in mind that there is no conclusive evidence. To point out that career education cannot accomplish its goals if all is dependent on a last minute crash program for graduating seniors, or a vocational unit in the ninth grade, does not prove that a full blown program must be developed for the kindergarten child. The program we are laying out in this paper is a sequential one beginning at the primary level and running throughout the student's entire school years. If evidence develops which shows this is neither necessary nor feasible, career educators, including ourselves, should not let such preconceived ideas stand in the way of making appropriate changes.

3. <u>The issue of relevancy.</u> The term relevancy has been badly abused by educators, and career educators are no exception. They have used it as a catchword to win over the reluctant. Thus we read and hear that career education will make the established curriculum relevant and that once this is attained students will eagerly learn all that is asked of them. Our own experience does not bear out this line of reasoning.

The crux of the problem seems to revolve around whether we are speaking of (1) relevance to the student, or (2) relevance to the world of work. If we are dealing with senior high students, and seniors in particular, there may be little difference between these two relevancies. But at the lower grade level the difference begins to appear. For instance, career educators who stress the role of relevance do not explain why learning how an electronics technician may use math skills will motivate seventh grade students to do their arithmetic assignments. Though the arithmetic at hand may be quite relevant to the work tasks faced by the technician, there is little evidence the work of the technician is in turn particularly relevant to the students' most pressing concerns.

As a direct outgrowth of this reliance on relevancy, career education stands in danger of being held accountable for objectives on which it is likely to have little influence. For instance, some educators are now looking to career education as a means for effecting improvement in basic skills performance, a drop in absenteeism and a reduction of the drop-out rate. These could possibly become secondary measures of career education's impact on students over a protracted period of time, as they could for any major curricular innovation. But to initiate career education programs with these goals in mind puts the career educator into a mode of looking first to the possible fringe benefits, and only secondly to the goals and objectives which career education was originally intended to serve.

We suspect that much of the evidence supporting the theme of career education's relevance and subsequent impact on other educational objectives is really the result of solid planning and teaching. In summary this is our point. Getting students interested in the career education curriculum will require the same effort and work on the part of the teacher as most any other curriculum. They cannot rely on relevance to make career education go, much less hope it will carry the rest of the curriculum with it.

Delivery Systems

By delivery systems we are referring to the various means used to bring curriculum and students together. Because these means constitute the most visible aspect of the total career

education effort, where the "action is," so to speak, they come in for a great deal of attention by career educators. Unfortunately, too much of this attention is directed toward an effort to identify the essential delivery system which will make career education successful. At this point in the development of career education, with very few good instrument and evaluation techniques for measuring the overall impact of one delivery system compared to another, it is premature to speak of which one is best, let alone essential.

From a very practical point of view, "whatever gets the job done" becomes the only criteria that really counts. If there is anything essential about a delivery system, or combination of them, it is the need for a clearly identifiable connection between them and curriculum. This seems too obvious to mention, and yet it is often ignored. Career educators, including ourselves, are sometimes first attracted to a particular delivery system for other reasons. It may seem like the best solution to a staff constraint; it may meet the criteria for special funding currently available; or, it may appear to hold a great deal of student appeal. These are all legitimate concerns and the fact that the process of selecting a given delivery system may begin with one of them is a simple recognition of how the day-to-day business of education operates. But if, after thoughtful reflection and analysis, no reasonable connection can be made between a delivery system and pre-determined career education curriculum, there can be little justification for pursuing it any further regardless of how attractive it remains for other reasons.

In the remainder of this section we have grouped delivery systems into three broad categories, including: (1) Instructional Systems, (2) Community Resource Systems, and (3) Career Information Systems.

Instructional Systems

Instructional systems share in common the fact that they are designed to deal with students in typical classroom-size groups, usually through the efforts of a single teacher or staff member.

Infusion

The National Picture

Though the national leadership has been reluctant to take specific stands about

the exact nature of career education, they have persistently pushed infusion as the favored delivery system. Like career education itself, there is no clear definition of what infusion includes or leaves out, however, a central concept does emerge in most of what is said or written about it.

Basically infusion aims toward the incorporation of the career education curriculum into the established curriculums currently being taught in the classroom at all levels, including both basic skills and subject area curriculums. Furthermore, it is implied by the term itself that this will be accomplished by an attitude on the part of the teacher as much as identifiable activities. In fact, when infusion is operating the way many of its proponents advocate, the student will hardly be aware of the fact that he or she is learning the career education curriculum.

CAM's Position

Our experience with infusion has been less than completely gratifying. Such a system, unless highly organized and mandated by administrative edict, becomes a hit-and-miss approach with its long range effectiveness depending on how successful support staff (as opposed to line staff) are at persuading teachers to participate.

Infusion can make a contribution to the total career education effort, but we doubt that it can carry the share that many proponents have assigned it, particularly in its purest version. Whereas ardent proponents see it operating most successfully where the teacher weaves small bits of the career ed curriculum into the on-going curriculum (almost on an incidental basis), our experience indicates that teachers are much more willing to incorporate career education into their teaching when working with longer units of time.

Much of the best work we have seen done at the elementary level could more accurately be called "units" than infusion. And, often the best of these are only tenuously tied to the established curriculum. With an increased emphasis on basic skills, which appears to be developing, we believe the incidental infusion of

career education will have to be followed with more organized and structured integration if career education is to find a permanent place in the elementary curriculum.

Much the same process has been observed at the secondary level where the traditional subject matter curriculums have been reorganized into a mixture of required and elective classes ranging in length from nine to eighteen weeks. Teachers have been more receptive to developing the career education curriculum within this format than a strict infusion model.

Problems of Infusion

1. Loss of identity. New and innovative efforts in education need a high degree of visibility if they are expected to have an impact. Infusion tends to have the opposite effect.

2. Need for greater coordination. If infusion is to become a major delivery system, a much higher degree of organization and coordination must be developed, particularly if proponents of career education want to assume responsibility for basic skills improvement etc. Exactly what parts of the career education curriculum are going to be delivered through infusion and at which point in the student's educational process? If these questions are not answered, infusion will continue to be a hit-and-miss system.

3. The poor quality of instructional materials. Regardless of how the career education curriculum finds its way into the classroom, good instructional materials will be required. Thus, the problems discussed here relate to other instructional systems as well as infusion.

   The rather sudden arrival of career education on the scene led many commercial publishers to get a line of products on the market as quickly as possible. As a result, much of it has been downright shoddy. Considering how reluctant the national leadership has been to define career education in specific terms, perhaps publishers assumed that anything might be accepted.

In too many cases the developers of these materials are simply unacquainted with the world of work and this fact is reflected in the contents.

The flood of materials coming out of experimental programs throughout the country have not been significantly better than the commercial materials. An occasionally fresh idea or approach has shown up, but most of the materials are rather hackneyed rewrites of a few old and worn ideas.

Fortunately, there has been noted improvement in the most recent materials. For instance, Bread and Butterflies, a video (or filmed) program for 10-12 year olds, is excellently done and as a result both teacher and student response has been very favorable. More instructional materials of this quality will provide career education with a delivery power which has been lacking up until now.

Laboratory Experiences

National Picture

The broad goal of career education is to bridge the gap between school and work. As in other areas, science for instance, and the teaching of foreign language, the gap can be partially closed by the use of laboratory settings. To date commercial publishers and vendors have been the most active proponents of this approach and have marketed a variety of complete laboratory settings and activities. Some of these have been developed around questionable rationales, all of them are expensive in both initial capital outlay and per-pupil operating costs.

CAM's Position

The Work Samples Lab, as developed within the CAM project, is an attempt to give junior high students a laboratory experience that will provide them with an experience base from which they can make useful generalizations. Within the lab the students are exposed to a series of experiences distinctly different than those which can usually be offered in the classroom. They cannot be an exact

duplication of experiences the student will later find on the job, as neither the time nor financial resources required are available, but they do give the student a chance to experience concepts rather than merely read or hear about them.

Problems in the Use of Laboratory Experiences

1. Need to evaluate. Evaluating the impact of laboratory experiences on students is not easy as their use is usually tied in with other classroom learning experiences. Sifting out the direct benefits of the lab activities is almost impossible. The problem becomes more difficult in cases like CAM's Work Samples Lab where the primary aim is to build an experience base which the student can later draw upon.

   Though the eventual benefit of the Work Samples Lab in particular, and the potential of other lab situations in general, is yet to be determined, we believe this approach is a delivery system which ought to be pursued further. Not with blind faith, but with both eyes open, one in search of the imaginative and the other playing a discerning role.

2. Utilization of the WSL if proven successful. Assuming the Work Samples Lab were to be proven successful, a number of questions regarding its utilization would have to be dealt with. Should multiple labs be developed in the district? Should participation be mandatory or voluntary? Should the lab experience be defined as an enrichment activity related to a specific subject area? Should the lab experience be offered at each grade level in junior high? What should be the total time commitment to the lab? What role does the lab play in special education? At least some of these questions would need to be answered before the lab could become a permanent part of the district's program.

The Career Education Class

The National Picture

A policy of providing separate classes for vocational education in public schools has long been supported at the national level. Such classes will continue to be a

vital part of the total career education effort by offering students an opportunity to gain specific employment skills. But national leadership has downplayed any effort to present a broader spectrum of the career education curriculum to students in any organized class that is not tied, however tenuously, to the established curriculum.

CAM's Position

The same reluctance toward career classes, as such, is noted at the local level. Much of the resistance to such classes seems to stem from past experiences. For instance, twenty or thirty years ago it was typical to find a class titled "vocations" taught to ninth grade students. Considering the lack of adequate materials that teachers had to work with, plus the strong academic bent that many of the classes took, it is little wonder that they were eventually abandoned.

It seems to us inappropriate to pre-judge the contribution a "career class" might make in today's instructional program on the basis of bad experiences from several decades past. Currently, several of our secondary schools have experimented successfully with classes which, though tenuously tied to the established curriculum, come very close to being "career classes." For instance, one junior high school offers a tri-mester class titled "Careers" which is a part of its English elective program. Each unit is designed to teach specific language arts skills, but the topics covered are primarily a part of the career education curriculum outlined earlier in this paper. Local community colleges are also offering career exploratory courses, and it may be that adaptable curriculum for secondary level will come out of these efforts. At this point we believe that arbitrarily closing the door on this potential delivery system is a mistake.

Problems of the Career Education Class

1. Need for thorough planning. The development of course content and activities to cover a quarter's time, or longer, requires sustained staff time not often available. Furthermore, as noted previously in this paper, few teachers have sufficient background in the career education curriculum to do an adequate job of designing a career education class.

2. Breaking out of the status quo. If every new class offered must fit into one of the established subject area curriculums, it would appear that the development of tomorrow's curriculum is up against restraints which are clearly designed to protect the status quo rather than being directed by guidelines developed to meet the changing needs of students.

Community Resource Systems

By community resource systems we refer to organized efforts to utilize both people and situations typically found in the community, but not commonly a part of the formal educational system.

The Business Industry Community

The National Picture

Extension of the classroom through the use of business and industry resources appears to be the sleeping giant of career education. A flourish of activity promoting this concept has been noted at the national level, including the following events: (1) Major trade associations such as the Chamber of Commerce and the National Association of Manufacturers have sponsored national work shops and printed related materials; (2) the National Advisory Council on Vocational Education has mounted a publicity thrust to bring school and work together; and (3) President Ford has asked for "new ways to bring the world of work and the institutions of education closer together. In addition there has been a noted increase in ex-

change programs between school and industrial personnel as well as the growth of a body of literature dealing with how to plan and evaluate career exploration field trips. Finally, the USOE leadership has advocated the expanded use of business and industry resources as a major means for giving career education the needed delivery power to effectively bridge the gap between school and work.

CAM's Position

In the Highline District, vocational education has been the pioneer in the use of business and industry resources within the field of career education. In keeping with State guidelines, the district has established and maintained advisory committees for each of its vocational programs, and though experiences has shown that their effective utilization requires continuous encouragement, they have made a vital contribution to their related programs. Certainly they have been instrumental in the development of work-experience arrangements which have become an integral part of several training programs.

But without question, our most significant experience with business and industry resources in the Highline District has been the use of the mini-bus service and Community Resource Specialist. The field trips which have been made possible for students through this delivery system are probably some of the best career education field trips being conducted anywhere in the nation.

Impressive as these successes have been, the distance between these limited efforts and a full-fledged use of business and industry as an extended classroom is vast, and by and large uncharted. On the other hand, such programs usually get off the ground only when a small group leads the way. During the past several years Highline has come to be viewed as a leader in the field of career education in the State of Washington, and we see no reason why the district should not step forward in this promising area. In fact, we have already done some exploratory

work with consultants from the Portland area where an active program has been developed by the Institute for Public Affairs Research working in cooperation with the Portland Public Schools and the Portland Chamber of Commerce.

Problems in the Use of Business and Industry Resources

1. Generating local level support. The concept of using business and industry resources is gaining recognition at the national level, but it is at the local level that the need must be recognized and supported if a program is to materialize. The problem is intensified because of the variety of groups which must be brought together, including the leadership of the business and industrial community as well as members of the local school board and staff.

2. Need for inter-district cooperation. Highline's world of work community is not limited to the geographic area covered by the Highline District, nor even southwest King County. It is all of the greater Seattle area, a community shared by at least ten other school districts, which means that any long range program will require a sophisticated system of cooperation and coordination.

Placement Programs

The National Picture

Career education for secondary schools is rarely discussed at the national level without some reference being made to the need for providing placement services. In response to this discussion, several states, including Florida, Michigan and Virginia have actually passed legislation requiring the schools to provide placement services in their high schools. Funding, however, has not necessarily been provided to assure that such services are in fact implemented. It would appear that talk of providing such services has far outstripped any hard commitment or ability to do so.

CAM's Position

The district has had several people at the secondary level in the position of Career

Community Consultants with partial responsibility in the area of placement. These positions have since been replaced with Vocational Information Specialists whose job description also includes a commitment to placement activities though the variety of duties expected of these people will certainly preclude anything more than a small part of their total time being spent in this area. The most effective placement work occurring within the district at this time is being done by the vocational education instructors.

Problems of Placement

1. Lack of description. Exactly what does placement involve? Does it include general activities such as dispensing labor market information to groups of students, or is placement specifically confined to helping individual students find jobs and post high school training programs? Until these, and similar questions are answered, talk of placement activities will continue to outpace practice.

2. Clarification of the schools role. There are other public agencies such as the Employment Security offices, who carry a much more obvious mandate to do placement work than do the public schools. Clarification of roles should be attempted before schools move in. Perhaps pressures should be brought to bear on such agencies before the schools simply assume their responsibilities.

Parent Participation

The National Picture

As with placement, there is a great deal of talk at the national level about the need to involve parents in the career education process. Not just in planning goals and objectives, but in the actual implementation and operation of the program. Much of the discussion is simply a recognition of the significant role many parents play in the decision making processes of young people. However, examples of parent participation almost always appears as the parent visits the classroom to explain his or her occupation, hardly an innovative idea.

CAM's Position

As at the national level, CAM has made a verbal commitment to the involvement of parents in the career education process. But breaking out of the traditional perception of the role, as described above, has been difficult. A significant attempt was made when a committee of parents was organized and met on a regular basis to explore the whole area of career education and the ways in which parents might participate. As a direct result of these meetings, a small booklet was published which outlines some of the ways in which parents could take an active part in the career development of their children. A copy of this booklet will be made available this year to every household in the district which has school age children.

A further role that has provided parents with an opportunity for participation is an active position on advisory committees, councils, or as members of a task force within a specific area of career education. CAM has utilized parents in a "Value Renewal Task Force," an advisory committee on career education for gifted and talented students, as well as the handbook described previously.

Problems With Parent Participation

1. Lack of organizational system. Even such a simple task as a parents describing his or her career in a given class requires time to contact the parent, agreement on schedule, and discussion relative to the students' needs. When this event occurs, it is usually on a situational basis that is not generalized to other classes at the same grade. Some type of system must be established to provide both continuing communication with parents as well as developing the parent resource person as a specific role.

   More formal linkages between career education and the various parent organizations could be the first step toward a total system of parental involvement.

2. A public relations gesture. Educators know their programs must have public approval if they are to succeed. Therefore, they have developed the habit

of speaking of a school and home partnership. And who will disagree? But for the most part it has become a routine public relations gesture. True, this district has sought broad public participation in the development of its Goals for Education, and in several schools parents are playing an active part in the day-to-day instructional program. Career educators can speak of the need for parental participation, but until they develop new ways to make it happen, it will be all talk.

Career Information Systems

Career information systems represent organized efforts to obtain, classify and make accessible to students (1) information about the world of work, including job descriptions, training programs and employment opportunities, and (2) information about their individual interests, values and aptitudes as they relate to work. Information systems may be utilized as part of a specific instructional program, but they also provide students an opportunity to explore career alternatives independently of an organized class or activity.

Career Resource Centers

The National Picture

The national literature on career education is unanimous in its agreement that a good career information system is a vital part of the career education program at the secondary level. The career resource center is most often presented as the logical solution, but rarely do those in a leadership position speak of the many problems involved in trying to put a good system into operation. (Several of these are noted below.)

CAM's Position

Even before CAM's funding became available, a career resource center was developed in one of the district's high schools. During the past two years the concept was expanded to a second school and this year similar centers will become operational in each of the district's remaining high schools. Efforts to implement resources centers at the junior high level have not been nearly as ambitious and for the most part are considered a part of the library services of the school.

In addition to these specific efforts, we have also developed a long range plan for implementing a district wide information system in all secondary schools which will feature (1) a centralized method for ordering, classifying and distributing materials to the schools, (2) a uniform filing system built around classifications systems developed by the Department of Labor, and (3) multiple student access systems. Such a system, we believe, will help students learn how to look at themselves and jobs in general as well as help them locate specific information they may be looking for. Implementation of this district-wide system will progress as rapidly as funding sources will permit.

Problems of Career Resource Centers

1. Lack of conceptual systems for organizing materials. Until recently there has been no practical system developed for organizing and handling career information, particularly the type of information traditionally defined as "occupational information." The cluster's approach promoted by the U.S.O.E. has not proven useful as it tends to create problems as much as it clarifies differences.

   The most promising work done in this area so far comes from the Appalachia Research Laboratory in West Virginia, where staff are currently refining a total career information system based on the Department of Labor's Dictionary of Occupational Titles. The system builds on the comprehensive work the Department of Labor has done, but recognizes the need to present information and concepts in a format and language suited to secondary students.

2. Job descriptive materials vs. labor market information. Most commercial materials, as well as much of the information published by agencies and organizations, falls into the category of "job description." That is, it describes various kinds of jobs, what the worker does, preparation required, etc. Very little information about employers, who is hiring and for which jobs they are hiring, is available. Many students need this kind of hard labor market data every bit as much as they need descriptive material, perhaps more.

3. Need for localized information. Most career information, whether produced by the federal government, commercial vendors or special interest groups, is aimed at too broad a cross section. Information about many jobs must carry a local flavor if it is going to carry much meaning for students. Some progress may be forthcoming in this area as the Department of Labor has awarded grants to twenty states (including Washington) to develop a comprehensive system for gathering and disseminating local labor market information to the various users of such data, including schools.

4. Repetition in commercial and "free" materials. Although several commercial vendors offer complete occupational information systems, very few of these systems include a comprehensive coverage of the labor market. Furthermore, each vendor's system includes pretty much the same sort of materials. As a result of these limitations, the amount of occupational information available through commercial vendors is not nearly as extensive as it might first appear. The same situation applies to much of the "free" materials produced by unions, professional associations, etc.

Student Assessment Instruments

The National Picture

It is generally recognized that student assessment instruments, including interest and value inventories, provide a useful source of information for the student in the development of self awareness related to work. So far, though, national leadership has neither stressed their use for this purpose nor provided criteria for evaluating their comparative usefulness. (Emphasis so far has been on the use of such instruments for program evaluation.) This has left the publishers of these instruments as their primary promoters, a situation which naturally leads to excessive claims regarding instrument effectiveness.

Probably the most ambitious effort to provide students with self-information through assessment instruments has been conducted by the armed services through the development and promotion of the Armed Services Vocational Aptitude Battery (ASVAB). Unfortunately, they have not always provided students with the follow-up

assistance promised for non-military interpretation of test results. But the recent development of new interpretive materials and placement of them in every secondary school may help remedy this situation.

CAM's Position

Because we view self-knowledge, as it relates to work, as an important part of the student's career development, we have promoted the use of the Ohio Vocational Interest Survey (OVIS) during the past two years. Among other reasons for selecting this instrument in particular, the OVIS, with its close tie-in with concepts developed by the Department of Labor, provides a useful method for teaching students about the world of work.

Though time may show that other instruments, or other assessment techniques, can provide a better return on the time and money required by the OVIS, for the time being we believe it ought to remain a part of the local career education effort. We would also encourage experimentation with one or more proven aptitude tests such as the Differential Aptitude Test, as well as continued cooperation with the armed services in use of the ASVAB.

Problems of Student Assessment Instruments

1. Limited validity and reliability of assessment instruments. While the educational staff may understand the weaknesses associated with most assessment instruments in terms of limited validity and reliability, students will not always heed the cautions which usually accompany their interpretation. Other assessment techniques might be developed which would reduce this hazard.

2. Self assessment instruments for whom? There is some question as to whether such instruments ought to be administered to all students. To the extent that the results are made available to all students in a meaningful manner, and better yet, used in the career education curriculum, we would say yes. If this does not occur, perhaps these instruments should be made available to students on a request basis and not required of everyone.

Computerized Information Systems

The National Picture

Because of their ability to handle large amounts of information, computers have been stressed as a logical approach to the problems incurred in trying to develop career information systems. National leadership, though by no means going overboard in their support, has promoted the idea of computerized information systems. In fact, the twenty Department of Labor grants mentioned above require that the information generated be prepared and made available for dissemination in a computerized format. (But no grant monies may be spent on hardware.)

CAM's Position

CAM has had the good fortune to field test a computerized career information system developed within the State of Washington under research money provided by the Vocational Education Act. We have even had an opportunity to provide input during refinement of the program. Several features of the program, including (1) its close tie-in with Department of Labor concepts, and (2) the localized nature of the labor market information included, makes it, in our opinion, a very strong program. Furthermore, its capacity to lead the student through a series of self-assessment exercises and then relate the student's responses to the career information stored in its files, provides students with a rapid feedback system which keeps them highly involved.

On the basis of the very positive response we have had from students, staff and parents alike, we believe the district ought to make every effort possible to continue with the program in one way or another.

Problems of Computerized Systems

1. The high cost of hardware. The high cost of computer hardware makes it impossible for every district to have its own program. Only through inter-district cooperation can a computerized system be made financially feasible in the long run.

2. The quality of information. Most of the problems discussed above in relationship to resource centers is also applicable to computerized information systems. The computers unique contribution is its ability to rapidly sort and match bits of information. If the information stored in the system is poor to begin with, or presented within a conceptual framework which lacks meaning for the student, there is little point in the whole system. Not only must the original information be accurate, easy methods for updating the information is essential.

3. The question of privacy. Some computerized systems have been designed which require storing and utilizing a great deal of sensitive information, such as test scores. Based on our experience so far, we doubt that these elaborate systems are really necessary.

Summary

We have written this position paper with two primary purposes in mind. First, it has provided a useful exercise for sorting out our ideas and concerns and putting them down in a systematic format. More important, though, we hope this paper will stimulate discussion and planning among all concerned, discussion and planning which will lead toward a permanent career education program in the Highline District.

There are many questions which fall under the general topic of "management" that we have not touched upon at all. For instance: How can effective in-service programs be implemented? Or, what changes in staffing patterns might best promote change? Finding answers to questions such as these is also an essential part of making a career education program go. In this paper, though, we have chosen to stick with the problem of defining and clarifying the basic nature of career education.

In looking back over our experiences of the past couple years, we think this concern with definition is our first and foremost need. What most districts, including Highline, lack at this point is a comprehensive plan that charts out the relationship between district goals, student objectives, curriculum and delivery systems. Such a plan should show (1) where we are operating a sound and proven career education program, (2) where we are

experimenting with potential program components, and (3) where we have no program at all. Until such a plan exists we will have no clear idea of exactly where we are going and the distance remaining to be covered. In the meantime career education will continue to exist within the district as a patchwork of projects depending on whatever sources of money become available.

Appendix F

CAREER ALTERNATIVES MODEL

CAM REPORT

Highline Public Schools | February 1976 | Career Alternative Model

SUPERINTENDENT Dr. Robert D. Seeley ASST. SUPERINTENDENT Dr. Gene Craig

CAREER GUIDANCE - AT THE CENTER OF CAREER EDUCATION

"Without career guidance, career education runs the risk of becoming an imposed set of externally applied goals and methods."

Gene Bottoms, writing in the American Vocational Journal, March 1975.

We agree, without reservation, with those who consider career guidance to be the central component of career education at the secondary level. Converting this belief into an operational program has been one of the most challenging tasks we have faced in the Career Alternatives Model.

The term guidance, in whatever context, usually brings to mind the image of the school counselor, a rather natural reaction considering that counselors probably make up ninety-five percent of the guidance staff in public schools. Consequently, we tend to assume that if a career guidance program is to develop, it will develop directly from the work of the counseling staff. Such thinking collides rather quickly with reality.

Although secondary counseling staffs have grown dramatically during the past fifteen years, counselors have increasingly come under attack for doing an ineffective job. Perhaps this situation was inevitable. With counselors under pressure from parents, teachers and administrators, as well as their own professional objectives, to play a vital role in almost every aspect of the student's development, it is not surprising that the goals of guidance have far outstripped the available resources. Arriving on this scene late, career educators have often met with less than overwhelming success when it comes to persuading counselors they have a central role to play in career education.

In the Career Alternatives Model we have attacked the problem from two directions. First, we have increased our initial efforts to involve counselors in the career education program at every available opportunity. Secondly, we have looked to new staffing patterns as a means to spearhead the career guidance movement. As a result, we have managed to implement a number of rather exciting career guidance activities which are indeed becoming the center of the secondary career education program in the Highline District. We are proud to feature them in this final issue of the REPORT.

GOALS REVISITED

In 1972 the Highline School District established four major goals for the instructional programs provided in its schools. Among those goals, one spoke directly to career education.

Because this goal has played a guiding role in the development and implementation of the Career Alternatives Model, we think it appropriate to review them for our readers in this final issue of the REPORT, the project's newsletter.

To Provide Each Student Opportunities to Consider Career Alternatives by:

- providing insight into the relationship of various facets of the world of work.
- assisting in self evaluation of interests, abilities and values relating to a variety of occupational roles.
- developing an understanding of the value and dignity of each person's work in creating a productive society.
- developing employment skills and competence to enter the job market.
- providing decision-making and planning activities as preparation for future training and education related to the student's lifework.

WTG: WORKER TRAIT GROUPS/A Common Guidance Element

The Worker Trait Group concept developed by the U.S. Department of Labor and used as the basic organizational structure for classifying jobs in the Dictionary of Occupational Titles, provides a common element tieing together three of the primary guidance and placement activities used in CAM. These include: (1) The Ohio Vocational Interest Survey, (2) the Computerized Career Information System, and (3) Career Information Files.

Within the Worker Trait concept, all jobs are classified into 114 Worker Trait Groups on the basis of a common relationship. Basic factors considered include:

1. DATA, PEOPLE AND THINGS: The extent to which the worker performs jobs that are related to data, people, and things.
2. GENERAL EDUCATIONAL DEVELOPMENT: The level of performance required of the worker in reasoning, mathematics and language.
3. SPECIFIC VOCATIONAL TRAINING: The amount of time the worker must spend in training or education to become qualified for the job.
4. APTITUDES: The different abilities the worker must have or be able to learn.
5. INTERESTS: The different types of work activity which a worker may prefer to do or avoid doing.
6. TEMPERAMENTS: The different types of working conditions or situations the worker must adjust to.
7. PHYSICAL DEMANDS: The ability to perform certain physical tasks demanded of the job.

Readers wishing to understand the Worker Trait concept more thoroughly will find a more detailed explanation in Appendices A and B of Volume II of the Dictionary of Occupational Titles.

VIS VOCATIONAL INFORMATION SPECIALIST

To the untrained observer it may often appear that a strong and successful management team is one that comes up with dramatic innovations that are both proposed and accepted in one bold jesture.

More often though, a small gain is made here and there without any major impact being noted. Then suddenly the accumulated gains build up to a breakthrough and a dramatic surge ahead occurs. This process, in summary, describes how the Highline District began the 1975-76 school year with five new Vocational Information Specialists added to its staff.

These new staff members reflect a recognition on the part of CAM that the career guidance program, if it is to survive and grow, must expand beyond the role of the school counselor as it has developed over the past fifteen years. With this in mind, the job description for the Vocational Information Specialists includes a K through 12 responsibility.

Though each VIS operates from a career resource center in one of the district's five senior high schools, they also carry a service area responsibility for the junior high and elementary schools feeding into their high school.

Broad duties outlined in their job description include:

- Development, operation and maintenance of a high school career information center.
- Assisting staff to develop student learning experiences in career development.
- Assisting elementary and junior high schools to articulate a career development program.
- Identifying and coordinating the use of school and community resources to facilitate career guidance and placement.
- Assisting in the development of new vocational education programs.

In less than a semester's time, the VIS's have made a definite impact on the total career education effort in the district, with particular emphasis on career guidance activities. In fact, the success of each of the career guidance activities described in this issue of the REPORT is in large part due to their hard work.

The real contribution to be made by the VIS's lies ahead. Right from the initial planning stages of CAM, project staff knew that the most crucial test facing career education would come when the federal funds had run out and career education would have to become a truly integral part of the district's regular instructional program. This transitional period has been the death of many fine programs over the years. This, we believe, is where the VIS's will prove to be invaluable.

Working at the building level with teachers, counselors and administrators, the VIS's are in a position to offer the kind of direct help which encourages staff to try out new materials and methods. Furthermore, their involvement at all levels gives them the broad perspective that will become increasingly important if career education is to become an articulated scope and sequence of learning activities.

While CAM may be remembered as the project that brought career education to the Highline District, it is the VIS's who are building it a permanent home.

VIS's meet with the Director of Career Development for a monthly planning session

CCIS *Using the Computer to Deliver Career Information*

Among CAM's most successful activities, none has generated more enthusiasm among staff, students and parents than the Computerized Career Information System.

Developed by Jim Marble of Clarke College, Vancouver, Washington, under a research grant from the Washington State Commission for Vocational Education, the CCIS is one of the most unique computerized career information systems currently operating.

The Worker Trait Group concept (see article p. 2) provides the organizational structure for this program which directs students through six exploratory exercises drawn directly from the classification systems used by the U.S. Department of Labor. When the student has completed all six exercises, the computer presents him or her with a list of up to twenty-five Worker Trait Groups which are compatible with the answers that he or she fed into the computer.

From this point the system can provide the student with a variety of descriptive materials including a description of any Worker Trait Group requested. These descriptions outline the basic requirements shared by the jobs classified within that group. Next the student may ask for a list of jobs related to that WTG which are stored in the computer's files.

In its present state of development the computer can provide information on 239 specific job titles, including job duties and requirements as well as the current employment outlook. As a round up the student may ask for information about local programs offering preparatory training for the job.

Though the majority of students follow the process sketched out above, the program is actually very versatile and can be accessed in a number of ways. For instance, a student wishing to know what training programs are available at a given community college, or the current employment outlook for any one of the 239 job titles can access this information without proceeding through any of the exploratory exercises. On the other hand, once having completed the basic program the student can also go on to a more elaborate exploration of any one of the six exploratory exercises with an opportunity to reconsider his or her responses and observe the subsequent changes in the printout provided.

The CCIS incorporates several strengths not found in all computerized information systems. For instance, some computerized systems are based on an elimination process. Once a job title (or in this case a WTG title) is eliminated on the basis of a student's response, it will not show up again. In contrast, the CCIS is built on a matching system. If a title is eliminated on one exercise it may show up on the next one.

The result is a more accurate representation of the relationship between people and their jobs. Most of us must "put up" with some negative features of our job in order to enjoy those which interest us. Likewise, the printout provided by the CCIS points out to students that they will probably have to learn to make adjustments to most jobs no matter how attractive it may seem at first glance.

A second strength incorporated in the CCIS is an economic one. Most computer systems stress extensive interaction between the student and the computer. Closer examination often reveals that expensive terminal time is being used for the printing and reading of basic information which could be processed much cheaper in a conventional printed form.

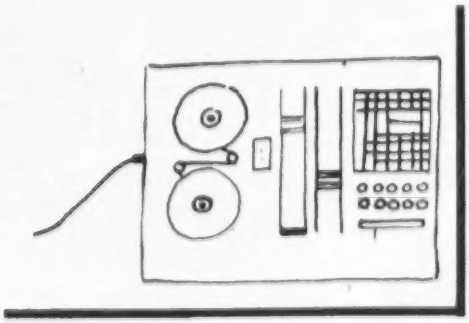
The computer's ability to read and print messages is not really its unique feature. Rather, it is the ability to scan, sort and match thousands of bits of information and come up with logical relationships. To keep the computer busy doing what it does best, (and only it can

A high school student feeds his answers into the computer terminal

do with any degree of efficiency) CAM has developed a workbook which allows the student to study the questions ahead of time and pre-record his or her answers.

When the student finally sits down to the computer terminal he or she then asks for the "batch" format and the computer can accept all of the students' answers without using valuable terminal time to print out lengthy questions or wait while the student thinks over his or her answer. This approach has reduced the time required to process a single student from forty to twenty minutes, thereby increasing the number of students who can be served by 100%.

By operating a single computer terminal which is rotated among the district's five high schools, CAM has been able to serve over 1,000 students during the past school year. (January '75-January '76). Though we're pleased with these results, we cannot help but wonder how many students we have not reached could make profitable use of this guidance activity? With this in mind we are looking ahead. Our goal? A permanent terminal in each high school.



OVIS Career Exploration Through An Interest Survey

Through extensive use of the Ohio Vocational Interest Survey (OVIS), CAM has made an effort to provide students with an opportunity to explore their interests in terms of career opportunities. After an initial trial use of the OVIS during the project's first year, CAM has provided the service for all eighth and eleventh grade students throughout the district.

Junior high students work their way through the 280 items of the OVIS

Among the variety of instruments that might have been used, CAM selected the OVIS primarily because of its direct relationship to the Worker Trait Group concept. We wanted an instrument that would reflect the "worker-centered" approach to career awareness and exploration that we had tried to build into all of CAM's major components. After studying the underlying rational used in the development and construction of the OVIS, we concluded that it could serve a useful instructional objective as well as provide the individual student with personalized information about his or her interest in a variety of job related activities.

In the OVIS, students are asked to respond to 280 items, each a brief statement of a worker activity selected from an actual job. In addition, the 280 items have been selected to include representation from all 114 of the Worker Trait Groups. These are in turn represented in the twenty-four Interest Scales used to report results of the survey to each student. Each Interest Scale has been developed around the basic requirements a group of jobs makes of the worker in terms of their relationship to data, people and things. This relationship is one of the pri-

mary constructs upon which the concept of the Worker Trait Groups has been developed.

As students explore and plan for the future, they must take into account both their personal strengths, in terms of accomplishments and interests, and the potential that various groups of jobs provide for utilizing those strengths. The OVIS, we believe, provides a useful guidance activity which can help students become aware of these dual factors in career selection.

Student Career PORTFOLIOS

During CAM's first year a study group of counselors spent nearly a week examining the possibility of developing a "career portfolio" for all secondary students. Though all counselors felt it would be a good idea, the project appeared more ambitious than any school wanted to initiate, even on a trial basis. Sue Bertino, VIS at Mt. Rainier High School, might also agree that the program is too ambitious. But its too late. She has already gone ahead and initiated it with over five hundred sophomore students this year.

Using the printed name tabs provided by the Explorer Scouts Career Survey, Sue set her student helpers to work preparing the five hundred student folders while she sat down with Chuck Judd from the CAM staff to work out the remaining details.

From its inception the portfolio was conceived as a record that would belong to the student from beginning to end. Students will prepare the initial information in their folders under Sue's direction. The folders will then be kept in the Career Resource Center where they will be available to the students whenever they wish to use them. Upon graduation the students will be free to take the portfolios with them.

What kinds of materials are going into the portfolio? To begin with, each sophomore has had an opportunity to complete a workbook copy of the Computerized Career Information System. Because all available classroom time on the computer terminal had been reserved for juniors and seniors, the sophomores' printouts were processed during evenings and weekends by Sue and several assistants. When completed, these printouts, along with a basic data sheet for employment interviews, a grade recording sheet and a description of the Worker Trait Group concept provided the initial input.

Next year, as juniors, these students will take the OVIS and their printouts will be included in the portfolios where they can be compared with the computer printouts as well as other career guidance materials the students may have accumulated in the meantime.

Teachers wishing to infuse career activities into their classroom work may bring all of their students portfolios to the classroom where students can utilize their personalized information as a resource. New materials developed as a result of the classroom activity can in turn become a permanent part of the portfolio.

Now that Sue has led the way, other VIS's and counselors are showing renewed interest. The original study group recommended that a portfolio be implemented for each student at the junior high level and follow them through to graduation. Following on the pioneer work at Mt. Rainier High School this year, such a system could very well be operating district-wide within a few years.

RESOURCE CENTERS

Giving Career Guidance Visibility

Career resource centers, though hardly an innovation introduced by CAM, have become the hub of an active career guidance program in each of the district's five high schools. It is in the resource center that the VIS's have pulled together occupational and training information, hosted resource speakers and visitors and set up the computerized career information system when it came to their schools.

Though by no means a "guidance office" in the conventional sense, the center provides the VIS

with a home base. A place to bring resources and staff together for planning and consultation as well as a place from which to operate as they move out into the junior high and elementary schools within their service area.

Students at Evergreen High School visit the Career Resource Center

Establishing resource centers in the junior high schools has already become a goal for most of the VIS's. These will differ from the high school model in several ways. Because no specialized staff will be available, the school librarian and/or the counselors will play an important part in their day-to-day operation. Secondly, materials will be selected with the junior high student in mind. Although some students at this age level will want detailed information about careers, it is anticipated that in keeping with the exploratory theme at this age, materials will be more general in their coverage of jobs.

Besides their obvious value as a delivery system for career information, career centers give the total career guidance effort a day-in and day-out visibility that keeps students aware of pending choices they will be making in the future. Such centers do not constitute a career guidance program by themselves, but they can become a focus point for all career guidance activities.

Wherever possible the career centers have been located within the area students have commonly associated with the established guidance services in their schools. Where this has been impossible because of limited facilities, specific efforts have been made to help students associate the services offered as part of a total guidance effort.

With service area responsibilities that take the VIS away from the career resource center, student help has been essential to keep the centers functioning throughout the day. Experience so far indicates that students can function very competently as aides once they become familiar with the materials kept in the center. In one school they managed the computerized career information system for up to a half day without direct supervision while the VIS attended meetings with staff at other schools.

Organizing Career Information Through WTG's

When occupational materials are filed and made accessible through a logical step-by-step process, students can tap the wealth of information they contain and use it as they make their career plans. Without such a system, occupational information can grow into an impossible labyrinth which will discourage all but a very few.

Following the pioneer work done by the Appalachia Educational Research Lab, CAM has organized career information files around the Worker Trait Group concept. Through use of the 114 Worker Trait Groups most information can be quickly classified and filed. Likewise, retrieval becomes an easily followed procedure rather than a frustrating search as students try to guess connections between job titles and filing categories.

As students begin to use the occupational information files they can readily make connections between the filing system and their previous experiences with the OVIS and the Computerized Career Information System which are also developed around the WTG concept. Together they provide the student with a logical continuity as he or she pursues career information.

Four of the district's five high schools have now initiated the system and plans call for expanding it to the junior high level as soon as resources allow. Refinement of the system will wait, however, until the new Dictionary of Occupational Titles, with its revisions, is published in 1976.

A FAREWELL BLAST

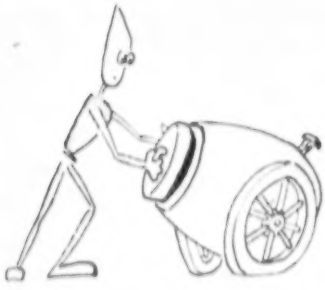
In preparing this last issue of the REPORT, it is difficult to believe that nearly three years have gone by since CAM's staff set up shop and laid its initial plans for introducing career education to the Highline School District. Although we were well aware that much hard work lay ahead, we set out with the enthusiasm typical of all who plan to march through the educational establishment and leave a permanent imprint.

Have we lost our enthusiasm? Not at all. But we have learned, among other things, to exercise patience. Education is a people oriented endeavor, and short of being faced with an all-out war, people change by fits and starts. Educators must accept this.

Have we left an imprint? Yes, we think so. The introduction of career education into the educational arena came at a time when a growing public disenchantment with schools was surfacing across the nation. In such a climate, many programs come under attack as being superfluous, particularly the newest additions.

Such has not been our experience. The solid career education activities we have developed and implemented have been accepted by all, including students, staff and parents, as vital and worthwhile.

In this farewell blast from the REPORT, we are happy to announce that career education in the Highline District is here to stay!



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